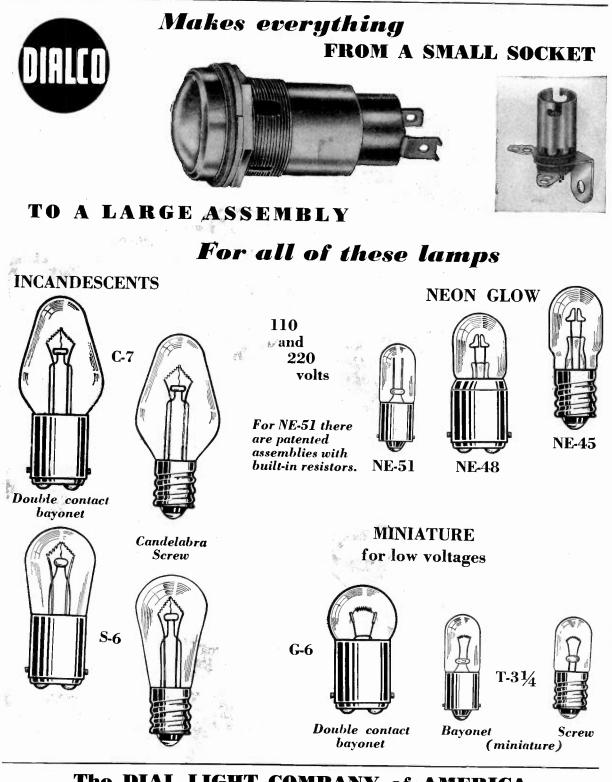
Thank You!

When writing for additional information or when ordering from sources of supply listed in this book, please mention

RADIO'S MASTER

Foremost Manufacturer of Pilot Lights



The DIAL LIGHT COMPANY of AMERICA Foremost Manufacturer of Pilot Lights NEW YORK 3, N. Y.



Foremost Manufacturer of Pilot Lights



CAPS

SCREW, BAYONET or FRICTION

The typical assemblies shown, mount in a 1'' clearance hole.

The first three are complete with the three types of caps, all with faceted glass lenses.

TERMINALS BINDING SCREWS or SOLDERING LUGS

Two choices are illustrated for lamps with candelabra screw base and three choices for lamps with double contact bayonet bases.

See the following pages for catalogue numbers of assemblies for all types of lamps.

All illustrations are approximately actual size.



All of these assemblies are listed by Underwriters' Laboratories, Inc.



SCREW FIG. 7

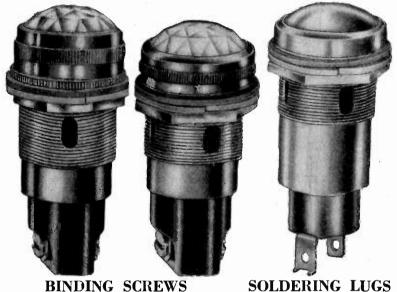


FOR SCREW BASE LAMPS

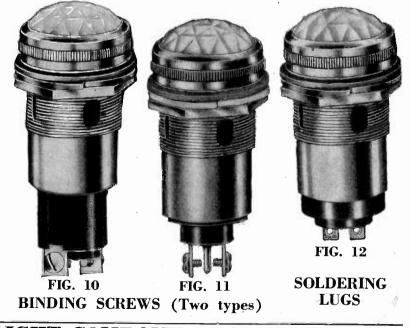
SAYONET FIG. 8



FRICTION FIG. 9



FOR BAYONET BASE LAMPS



The DIAL LIGHT COMPANY of AMERICA Foremost Manufacturer of Pilot Lights NEW YORK 3, N. Y.

Foremost Manufacturer of Pilot Lights

NEW YORK 3, N. Y.



CATALOG NUMBERS FOR ENCLOSED ASSEMBLIES Mount in one inch clearance hole **UNDERWRITERS' LISTED**

For S-6 Lamp with Candelabra Screw Base

51901-111 Screw cap, Convex lens, frosted back (Fig. 1) Screw terminals (Fig. 8) Screw cap, Large convex lens, frosted back (Fig. 2) Screw terminals (Fig. 8) Screw cap, Faceted lens (Fig. 5) Screw terminals (Fig. 8) Screw cap, Large torpedo lens (Fig. 4) Screw terminals (Fig. 8) Screw cap, Convex lens, frosted back (Fig. 1) Soldering lugs (Fig. 9) Bayonet cap (Fig. 8) Convex lens (Fig. 1) Screw terminals (Fig. 8) Friction cap (Fig. 9) Convex lens (Fig. 1) Screw terminals (Fig. 8) Light Shield cap (Fig. 13) Binding Screw terminals (Fig. 8) 71101-111 Mechanical dimmer (Fig. 14) Soldering terminals (Fig. 9) 78101-111 Polaroid dimmer (Fig. 14) Soldering terminals (Fig. 9)

For S-6 Lamp with Double Contact Bayonet Base

513202-111 Screw cap, Convex lens, frosted back (Fig. 1) Screw terminals (Fig. 10)

- 613202-111 Screw cap, Large convex lens, frosted back (Fig. 2) Screw terminals (Fig. 10)
 - Screw cap, Faceted lens (Fig. 5) Screw terminals (Fig. 10)
 - Screw cap, Torpedo lens (Fig. 3) Screw terminals (Fig. 10)

Bayonet cap (Fig. 8) Convex lens, frosted back (Fig. 1) Screw terminals (Fig. 10)

Friction cap (Fig. 9) Convex lens, frosted back (Fig. 1) Screw terminals (Fig. 10)

For G-6 Lamp with Double Contact Bayonet Base

Screw cap, Convex lens, frosted back (Fig. 1) Screw terminals (Fig. 11) Screw cap, Faceted lens (Fig. 5) Screw terminals (Fig. 11) Screw cap, Torpedo lens (Fig. 3) Screw terminals (Fig. 11) Screw cap, Dome plastic lens, matted back (Fig. 6) Screw terminals (Fig. 11) Screw cap, Convex lens, frosted back (Fig. 1) Soldering terminals (Fig. 12) Bayonet cap (Fig. 8) Convex lens (Fig. 1) Soldering terminals (Fig. 12) 31204-111 Friction cap (Fig. 9) Convex lens (Fig. 1) Soldering terminals (Fig. 12)

For NE-45 Neon Glow Lamp, Candelabra Screw Base

51914-131 Screw cap. Convex lens (Fig. 1) Binding screw terminals (Fig. 8) 80914-841 Screw cap, Dome lens (Fig. 6) Binding screw terminals (Fig. 8) 41914-131 Bayonet cap (Fig. 8) Convex lens (Fig. 1) Binding screw terminals (Fig. 8) Friction cap (Fig. 9) Convex lens (Fig. 1) Binding screw terminals (Fig. 8) Screw cap, Convex lens (Fig. 1) Soldering terminals (Fig. 9) 80114-531 Screw cap, Torpedo lens (Fig. 3) Soldering terminals (Fig. 9)

COLOR-The final figure 1 in the above number indicates RED LENS COLOR. If other color is desired, change final figure to one from table below. Blue-4,

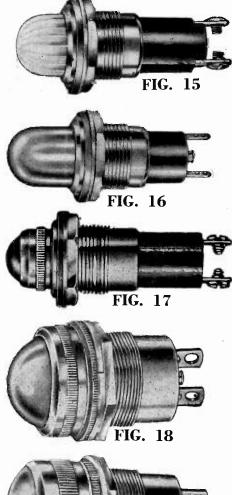




Cap with Dimmer-Mechanical or Polaroid Assembly with Light Shield for S-6 Lamp for S-6 or G-6 Lamps · See Listing above See Listing above

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NEW YORK 3, N. Y.



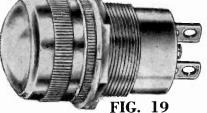






FIG. 21 (Dimmer)

ENCLOSED ASSEMBLIES FOR T-3¹/₄ MINIATURE LAMPS AND NE-51 NEON GLOW LAMP

Smaller assemblies as illustrated in Figs. 15, 16, 17, 20 and 21 mount in 11/16" clearance hole. Figs. 18 and 19 require 1" clearance hole.

CATALOGUE NUMBERS

FOR T-31/4 Miniature Bayonet Base Low voltage incandescent lamps

521310-991	Multivue cap, Screw terminals (Fig. 15)
52410-991	Multivue cap, Soldering terminals
91410-931	Long clear cap, Soldering terminals (Fig. 16)
811310-111	Screw-in cap, Convex lens, Screw terminals (Fig. 17)
80410-831	Screw cap, Dome plastic lens, Soldering terminals (Fig. 18)
801310-831	Screw cap, Dome plastic lens, Screw terminals
51410-111	Screw cap, Convex lens, Soldering terminals (Fig. 19)
511310-111	Screw cap, Convex lens, Screw terminals
21410	Light shield cap Screw terminals (Fig. 20)
93410-111	Polaroid dimmer cap, Convex lens, Soldering terminals
. 1	(Fig. 21)

COLOR— The final figure 1 in the listed numbers indicates RED LENS COLOR. If other color is desired, change final figure to one from table below:

Green-2, Amber-3, Blue-4, White-5, Yellow-6, Clear-7

FOR NE-51 Neon Glow Lamp

NOTE: The assemblies listed below for the NE-51 Neon Glow Lamp contain built in resistors, a patented DIALCO feature. For choice of resistor value to suit conditions, specify circuit voltage and service, continuous or intermittent.

521308-991 52408-991 91408-931 811308-111 80408-831 801308-831 51408-111	Multivue cap, Screw terminals (Fig. 15) Multivue cap, Soldering terminals Long clear cap, Soldering terminals (Fig. 16) Screw-in cap, Convex lens, Screw terminals (Fig. 17) Screw cap, Dome plastic lens, Soldering terminals (Fig. 18) Screw cap, Dome plastic lens, Screw terminals Screw cap, Convex lens, Soldering terminals (Fig. 19)
51408-111 511308-111	Screw cap, Convex lens, Soldering terminals (Fig. 19) Screw cap, Convex lens, Screw terminals

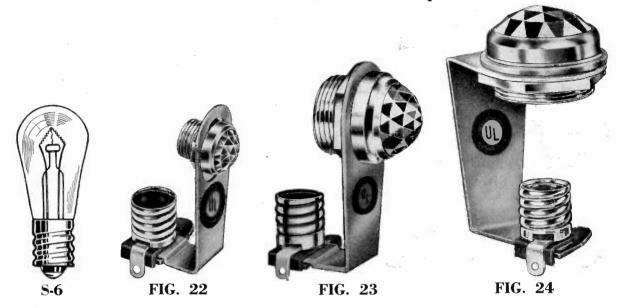


All of these assemblies are listed by Underwriters' Laboratories, Inc.



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OPEN PILOT LIGHT ASSEMBLIES For Candelabra Screw Base Lamps



NE-45

For S-6 Incandescent Lamps, candelabra screw base No. 10-18-14-431 Faceted 1/2" Lens (for 7/6" mounting hole) (Fig. 22) No. 25-18-15-431 Faceted 5%" Lens (for 11/6" mounting hole) (Fig. 23) No. 31-18-16-431 Faceted 1" Lens (for 1" mounting hole) (Fig. 24) All of the above assemblies are listed by Underwriters' Laboratories, Inc.



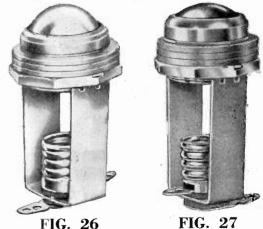
RS. LABOR



FIG. 25

For G-6 Low voltage lamps, candelabra screw base No. 610-121 Convex ¹/₂" lens (for ⁷/₁₆ mounting hole)

COLOR—The final figure 1 in the listed numbers indicates RED LENS COLOR. If other color is desired, change final figure to one from table below: Green-2, Amber-3, Blue-4, White-5, Yellow-6, Clear-7 Octagon lock nut and bracket on these two units welded into one-piece construction.

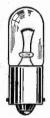


For NE-45 Neon Glow Lamps, candelabra screw base

No. 67BN-831 Dome Plastic Lens (3/4" diam.) No. 66N-131 Convex Glass Lens (3/4" diam.) (Both mount in ¹³/6" hole. Cap removable)

Foremost Manufacturer of Pilot Lights NEW YORK 3, N. Y.

OPEN PILOT LIGHT ASSEMBLIES For T-3¹/₄ Low voltage Incandescent Lamps



T-3¹/₄ Miniature Bayonet Base





T-3¹/₄ Miniature Screw Base

Typical assembly for bayonet base lamp. Available also for screw type, see listing below.

FIG. 29

Assemblies for T-31/4 miniature bayonet base lamps

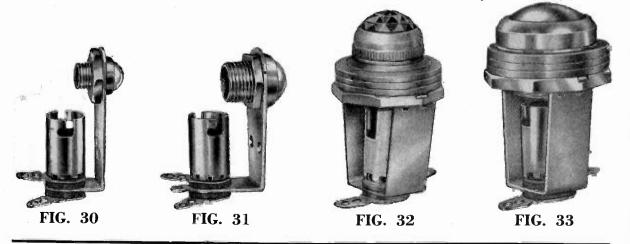
No. 810B-431	Faceted 1/2"	lens.	For ¹¹ / ₁₆ " mounting hole. Fig. 29	
No. 755-621	Convex 11/32	lens	For %2" mounting hole. Fig. 30	
No. 710-121	Convey 1/6"	leng	For ⁷ / ₁₆ " mounting hole. Fig. 31	
	Faceted 1/2"	long	For 11/4" mounting note. Fig. 31	
	Conver $3/2$	' i	For ¹¹ / ₁₆ " mounting hole. Fig. 32	
110. 01D-111	Convex $\frac{9}{4}$	lens.	For ¹³ / ₁₆ " mounting hole. Fig. 33	

Assemblies for T-31/4 miniature screw base lamps

No. 810M-431	Faceted $\frac{1}{2}''$ lens.	For ¹¹ / ₁₆ " mounting hole.	Similar to Fig. 29
140. 555-021	Convex 1/32 lens.	For [%] 2" mounting hole.	Similar to Fig. 30
No. 855-431	raceted 1/9" lens.	For $\frac{7}{16''}$ mounting hole. For $\frac{11}{16''}$ mounting hole.	Similar to Fig. 20
No. 66M-111	Convex $\frac{34}{4}''$ lens.	For ¹³ / ₁₆ " mounting hole.	Similar to Fig. 33

COLOR—The final figure 1 in the listed numbers indirates RED LENS COLOR. If other color is desired, change nnal figure to one from table below: Green-2, Amber-3, Blue-4, White-5, Yellow-6, Clear-7

Octagon lock nut and bracket on these two units welded into one-piece construction.



Foremost Manufacturer of Pilot Lights NEW YORK 3, N. Y.

LAMP SOCKETS

Four series with choice of mounting bracket (Add suffix number for bracket desired)



No. 604

600 SERIES Candelabra screw



No. 508

500 SERIES

Miniature screw



No. 706

700 SERIES Miniature bayonet

Canalemora screw	
Socket suffix	
No.	Bracket Description
-01 Plain o	clip, upturned
-02 Plain o	clip, downturned
-03Clip w	ith ears, upturned
0.4 Clin w	gith ears, downturned
05 Right	angle unturned, slotted, Slot
-06 Right	angle, downturned, slotted. Slot
.07 Plain	socket, no bracket
-08 Right	angle, downturned, short. Hole Size
-09 Right	angle, upturned, short. Hole Size732
-11 Square	U-shaped. Hole Size
	The set Hole Size 5%"

-12 Horizontal (no bend), short. Hole Size 5/32" -13 Horizontal (no bend), slotted. Slot 5/32" -19 Right angle, upturned, long. Hole Size 9/4" -19 Definition of the second statement of the second

Heavy Bakelite Sockets NAVY SPECIFICATIONS



Miniature bayonet-No. 9S4931 (illustrated) Double Contact bayonet 9S4634 Candelabra screw 9S5038 Candelabra screw 9S2036 (side spring lock)

No. 312

300 SERIES Miniature bayonet **Bakelite** insulated-wire leads



No. 18-73 Upturned bracket (illustrated) No. 18-74 Downturned bracket No. 18-75 Horizontal bracket No. 18-76 Downturned and slotted bracket (illustrated)

Foremost Manufacturer of Pilot Lights NEW YORK 3, N. Y.

Lens Holders with Lenses for Panel Mounting Screw Types Are Complete With Nut for Shank



5006-111

9/32"-27 thread





7005-111 3/8"-24 thread 7

34-841

PLASTIC LENS



10006-111 7/16"-27 thread



25006-111 11/16"-27 thread



34-431 GLASS LENS

FLAT



FACETED



6004-111 9/32" hole

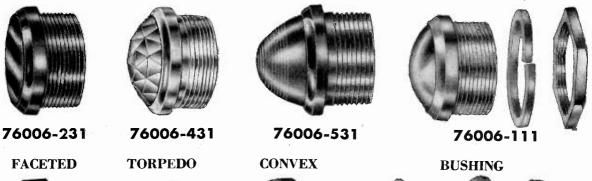


38-111 3/8" hole

PUSH-IN TYPES

TORPEDO

CONVEX





The above two groups mount in 1" clearance hole. The upper series lock to the panel and are tamper proof. The lower series permit lamp replacement from the front of the panel.

LENS COLOR—The final figure 1 in the listed numbers indicates RED LENS COLOR. If other color is desired, change final figure to one from table below:

Green-2, Amber-3, Blue-4, White-5, Yellow-6, Clear-7

The DIAL LIGHT COMPANY of AMERICA Foremost Manufacturer of Pilot Lights NEW YORK 3, N. Y.

CONNECTORS FOR STANDARD SINGLE CONDUCTOR SHIELDED CABLE — FOR MICROPHONES, SPEAKERS, PICK-UPS, JACKS



No. 100 CABLE CONNECTOR (Female)



No. 51 CIRCUIT GROUNDING MALE CHASSIS CONNECTOR



No. 101 CABLE CONNECTOR (Male)



No. 103 CAP AND CHAIN



No. 50 CHASSIS CONNECTOR No. 50P Similar but drive fit *into hole in chassis*,



No. 102 PLUG WITH MALE THREAD Fits standard jacks



For most lamps — L-73 (illustrated) For $T4\frac{1}{2}$ lamps — L-45



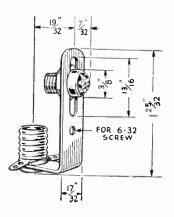
Dial and Jewel

PILOT LIGHT ASSEMBLIES

JEWEL LIGHT ASSEMBLIES

11/32" Jewel... Vertical Mounting

No. 5 TYPE



The No. 5 type is unique in its field because it can be adapted to the focal lengths of any miniature screw or bayonet lamp. The opening in the shank of this jewel is so small, it is necessary to have the filament of the lamp directly behind the jewel. The slotted jewel mounting on the No. 5 makes this feature possible. This is an inexpensive unit, and it presents a neat appearance on small instrument panels.

STANDARD TYPES

Type Number	Style Socket	
5	Miniature Screw	
5B	Miniature Bayonet	

SPECIFICATIONS

MOUNTING: Mounts in $9/32^{\prime\prime}$ diameter hole on panels up to $\frac{1}{4^{\prime\prime}}$ thick.

RATING: Tested on 110 volts. Can be supplied to withstand 1000 volts AC for a period of one minute.

- LAMPS: Designed to house any filament type miniature screw or miniature bayonet lamp.
- COLORS: Amber, blue, colorless, green, ruby, white or yellow.
- FINISHES OF GLASS: Standard unit is equipped with faceted glass. Smooth glass may be obtained upon request.

PLATING: Panel hardware is bright nickel, other parts cadmium.

SPECIAL PLATING: Panel hardware can be supplied with statuary bronze or chrome plating for small extra charge. PACKING: Packed in bulk unassembled.

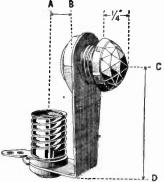
Ρ	Α	R	Т	S
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Part No.	Description	115	Socke
	Bescription	215BC	Socke
14	Jewel Assembly with Nut	215	Socket
15	Nut	615BC	Socke
123H	Socket Assembly for No. 5	16	Iewel
223H	Socket Assembly for No. 5B	17	Nut

¹/₂" Jewel... Vertical Mounting **No. 10 TYPE**

NOTE:

Dimension A to B is from center of socket to outside of bracket. C to D from center of jewel to bottom of bracket. The No. 10B and 10H have brackets with oblong hole permitting adjustment to obtain best position for lamp filament back of jewel.



Net Wt. 0.029 lb.

STANDARD TYPES

Type Number	Style Socket	A to B	C to D
10	Min. Screw	1/2 **	11/4"
10B 10H	Min. Bayonet SC Cand. Bay.	3/4 '' } 3/4 '' {	Adj. from 1 156" to 15/8"
10G	Min. Bayonet	1/2 **	11/4"

SPECIFICATIONS

LAMPS REQUIRED: For No. 10 and 10B, miniature screw or bayonet base of any voltage (tubular preferred). For No. 10G, miniature bayonet, type G3½ bulb. For No. 10H any SC candelabra bayonet base lamp may be used. Mounts in 7/16" hole on panels up to ¼" thick. • JEWEL: Diamond cut (faceted); Amber, Blue, Crystal, Green, Ruby, White (Milk White), and Yellow. • SPECIAL FINISHES: Chrome, Black Nickel, Statuary Bronze. • PACKED in bulk with jewels and nuts in bags. • SPECIAL JEWELS: SP—Smooth, plain; SFA—Smooth, frosted all over; SFB—Smooth, frosted on back.

PARTS

Part No.	Description
115	Socket Assembly for No. 10
215BC	Socket Assembly for No. 10B
215	Socket Assembly for No. 10G
615BC	Socket Assembly for No. 10H
16	Jewel and Nut
17	Nut

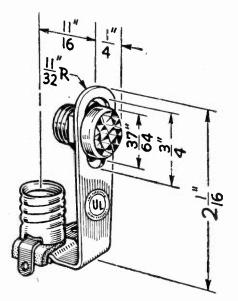


PILOT LIGHT ASSEMBLIES

Dial and Jewel

JEWEL LIGHT ASSEMBLIES

¹/₂" Jewel... Vertical Mounting **NO. IOC TYPE** UNDERWRITERS' APPROVED



The No. 10C is an inexpensive candelabra screw base jowol light assembly that is Underwriters' Approved for 75 watt-125 volt service. It is particularly suited to applications where there is a minimum of depth behind the panel, and lamp replacement from the front of the panel is not necessary. The mounting bracket has a slotted hole to facilitate adjustment for placing the lamp filament directly behind the jewel giving maximum illumination of the jewel.

SPECIFICATIONS

MOUNTING: Mounts in 7/16" hole on panels up to 1/4" thick. For panels between 1/4" and 3%" specify No. 16L jewel. RATING: 75 watts, 125 volts.

LAMPS: Will house any candelabra screw base lamp.

COLORS: Amber, blue, colorless, green, ruby, white and yellow.

FINISHES OF GLASS	SYMBOL
Faceted (Diamond Cut)	Standard Finish
Smooth Plain (Smooth face no frosting)	SP
Smooth, Frosted All Over	SFA
Smooth, Frosted on Back Only	SFB

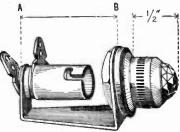
PLATING: Jewel assembly is burnished nickel. All other parts are cadmium. Statuary bronze, chrome, and black nickel plating can be applied to jewels for a small extra charge. PACKED: Packed in bulk unassembled.

PARTS

Part No.	Description
16	Jewel Assembly and Nut
17	Nut
415BC	Socket Assembly

¹/₂" Jewel...Horizontal Mounting **No. 20 TYPE**

The original Drake Horizontal Mounting Lamp Assembly, and still a fast seller. When ordering, please be sure to select the correct part number for the thickness of panel on which to be installed; otherwise lamp may not extend far enough forward for easy removal, or if too far, prevent bezel screwing all the way on collar.



PATENT NO. 2220515 Net Wt. 0.036 lb.

STANDARD TYPES

Type	Style	Length	Panel
Number	Socket	A to B	Thickness
20	Min. Bayonet	1-13/32"	0" to 7/64"
30	Min. Bayonet	1- 7/32"	1/4"
40	Min. Bayonet	1-11/32"	1/8 to 15/64"
20S	Min. Screw	1- 1/16"	0" to 15/64"
30S	Min. Screw	15/16"	1⁄4"

NOTE: Dimension A to B is overall length of socket assembly with lamp installed. Can be furnished with same plastic caps as No. 51 and 51N. Specify by using Nos. 31C or 31SC.

SPECIFICATIONS

LAMPS REQUIRED: Miniature T3¼ tubular, G3½ globular or other lamps of same over-all length. Lamp removable from front of panel. • Mounts in 11/16" hole. • JEWEL: Diamond cut (faceted); Amber, Blue, Crystal, Green, Ruby, White (Milk White) and Yellow. • SPECIAL FINISHES: Chrome, Black Nickel, Statuary Bronze. • PACKED in bulk with jewel, collar and nuts in bag. • SPECIAL JEWELS: SP—Smooth, plain; SFA—Smooth, frosted all over; SFB— Smooth, frosted back.

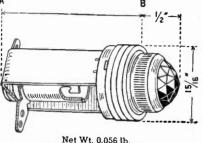
P	Α	R	T	S
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Part No.	Description
220A	Socket Assembly for No. 20
221F	Socket Assembly for No. 30
221V	Socket Assembly for No. 40
122V	Socket Assembly for No. 20-S
122G	Socket Assembly for No. 30-S
25	Jewel
27	Nut
28	Collar for 0"-1/4" panels, 3%" long
30	Collar for 3/8" panel, 1/2" long



JEWEL LIGHT ASSEMBLIES

1/2" Jewel...Horizontal Mounting No. 50 TYPE A B



PATENT NO. 2220516

This patented Drake Assembly is ideal for various applications. Specially designed for use on more than one thickness of panel. Supplied with two fibre washers which compensate for panel thicknesses. It is of sturdy construction, easy to mount, and requires little space.

STANDARD TYPES

Type	Style	Length	Panel
Number	Socket	Ā to B	Thickness
50	Min. Bayonet	1-9/16"	0" to ¹ /4"
50.5	Min. Bayonet	1½"	17/64" to ³ /8"
50S	Min. Screw	1½"	0" to ¹ /4"
50.5S	Min. Screw	1½"	17/64" to ³ /8"

NOTE: Dimension A to B is overall length from front of panel with lamp installed. No spacing washers are furnished with part No. 50.5S.

SPECIFICATIONS

LAMPS REQUIRED: Miniature T31/4 tubular, G31/2 globular or other lamps of same over-all length. • Lamp removable from front of panel. • Mounts in 11/16" hole. • JEWEL: (Diamond cut faceted); Amber, Blue, Crystal, Green, Ruby, White, (Milk White) and Yellow. • SPECIAL FINISHES: Chrome, Black Nickel, Statuary Bronze. • PACKED in individual boxes for jobbing trade; in bulk and fully assembled for manufacturing trade. • SPECIAL JEWELS: SP-Smooth, plain; SFA-Smooth, frosted all over; SFB-Smooth, frosted on back.

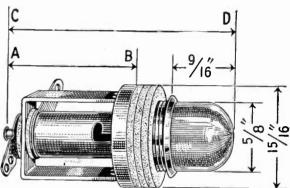
P	Α	R	Т	S
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Part No.	Description
25	Jewel
28	Collar ¾" long for No. 50 & 50S
30	Collar 1/2" long for No. 50.5 & 50.55
50A	Round Nut
50B	Fibre Washer, 11/16" I.D. x 15/16" O.D. x 1/16" thick
225A	Min. Bay. Socket Assembly for No. 50
225C	Min. Bay. Socket Assembly for No. 50.5
125B	Min. Screw Socket Assembly for Nos. 50S & 50.5S

Copyright by U. C. P., Inc.

Plastic Dome ... Horizontal Mounting Lamp Replaceable from Front of Panel

No. 51 TYPE



NET WEIGHT 0.045 lbs.

PATENT NO. 2220516

The No. 51 is a patented Drake assembly featuring a plastic dome indicator which fosters wide angle observation. The whole dome is illuminated, therefore it can be easily seen from the side. It is a good eye-catcher because of its brilliant glow, and for this reason, it makes a wonderful warning light. The unit is supplied with three 1/16'' thick fibre spacing washers, so that when the unit is mounted on a thick panel, these washers can be removed making the lamps as accessible for replacement as when mounted on a thin panel. on a thin panel.

	Len	igth		1		
Part A to No. B		C to D	Style Number Socket Washe		r of Spacing rs Required	
51	11/8"	118"	Min.	Panel thickness	18" 1/8" 4" 1/4"	
			Bay.	Washers	3 2 1 0	
51.5	1"	118"	Min.	Panel thickness	1/4" 18" 3/8"	
			Bay.	Washers	2 1 0	
51S	7/8"	1117"	Min.	Panel thickness	18" 1/8" 14" 1/4"	
-	!		Screw	Washers	2 1 0 0	

Length A to B is overall length of socket assembly with lamp installed.

SPECIFICATIONS

MOUNTING: Mounts in 11/16" diameter hole. RATING: Tested on 110 volts. Can be supplied to withstand 1,000 volts AC for a period of one minute. LAMPS: Designed to house the miniature bayonet or miniature screw base T31/4 lamp. Will also house G31/2 bulb, but lamp is not quite as accessible for replacement. COLORS: Amber, colorless, green and red. PLATING: Regularly supplied with nickel plated panel hardware, all other parts cadmium plated. SPECIAL PLATING: Panel hardware can be supplied with chromium, statuary bronze, or black nickel plating. Extra charge for these finishes. PACKING: The units are packed in bulk and fully assembled.

PARTS

Part No.	Description
25P	Plastic Dome
28	Collar ¾" long for 51 and 51S
30	Collar 1/2" long for 51.5
50A	Round Nut
50B	Fibre Spacing Washer*
125B	Socket Assembly for 51S
225C	Socket Assembly for 51
225B	Socket Assembly for 51.5

G-13

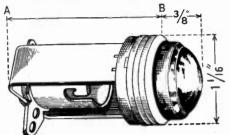


Dial and Jewel PILOT LIGHT ASSEMBLIES

MECHANICALLY SECURE TERMINALS USED ON 110 VOLT CANDELABRA ASSEMBLIES

3/4" Jewel...Horizontal Mounting

No. 60 TYPE



PATENT NO. 2220516 Net Wt. 0.068 lb.

This patented item is similar to the No. 50, but has a 34'' jewel in a polished chrome "slip-fit" bezel. Supplied with three fibre washers which compensate for panel thickness. Its sturdy construction, ease of mounting, and small size make it an ideal assembly.

Part	Style	Length
Number	Socket	A to B
60	Min. Bayonet	1- 9/16"
60N	Cand. Screw for NE45 lamp	1-13/16"
60S	Min. Screw	1- 5/16"
60T	Cand. Screw for 115v, 6W, T41/2 lamp	2''

NOTE: Dimension A to B is overall length from front of panel with lamp installed.

SPECIFICATIONS

MOUNTING: Mounts in 13/16" diameter hole on panels 0" thick. For panels 17/64" to 56' thick use parts 60.75, 6 60.75S, or 60.75T. to 1/ thick use parts 60.75, 60.75N,

RATING: Miniature bayonet and screw types are tested on 110 volts. Candelabra screw types will withstand a voltage breakdown of 1,000 volts.

COLORED DISCS: The No. 60 types are regularly supplied with colorless, smooth glass frosted on back behind which is placed a colored disc. The advantage of this method is that the glass appears white until the lamp is lighted.

COLORS: Amber, blue, colorless, green, red, white, or yellow.

OTHER FINISHES OF GLASS	SYMBOL
Faceted (Diamond Cut) Smooth Plain (Smooth face and no frosting) Smooth, frosted on back (Smooth face frosted on back only)	FAC SP SFB

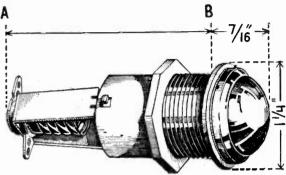
Colored glass is furnished when any of the above types are specified. We recommend smooth plain glass for use with neon specified. glow lamps.

r aki	S
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Part Number	Description
60Ā	Jewel
60B	Collar 25/32" long for Nos. 60.75, N, S, and T
60C	Collar 13/32" long for Nos. 60, N, S, and T
60D	Round Nut
60E	Color Disc
60G	Retaining Ring for Color Disc
60I	Fibre Washers, 13/16" I.D. x 1 ¹ ₁₀ " O.D. x 1/16" thick
128V	Min. Screw Socket Assembly for Nos. 60S & 60.75S
228U	Min. Bay. Socket Assembly for No. 60
228V	Min. Bay. Socket Assembly for No. 60.75
428U	Cand. Screw Socket Assembly for No. 60.75N
428W	Cand. Screw Socket Assembly for Nos. 60N and 60.75T
437P	Cand. Screw Socket Assembly for No. 60T

1" Jewel . . . Horizontal Mounting

No. 75 TYPE



PATENT NO. 2192345

Net Wt. 0.107 lb. The patented No. 75 type has a "slip-fit" bezel. It is exceedingly neat in appearance. Very substantial and easy to install. All parts are burnished cadmium plated except the bezel which has a highly polished chrome finish.

Type	Style	Length
Number	Socket	A to B
75	Candelabra	21/8"
175	Min. Screw	13/4"
275	Min. Bayonet	17/8"
375	S.C. Cand. Bayonet	2-1/32"

NOTE: Dimension A to B is over-all length. Overall diameter of mounting nut 13/8

SPECIFICATIONS

SPECIFICATIONS MOUNTING: Mounts in 1" diameter hole on panels up to 1/2" thick. RATING: Nos. 175 and 275 are tested on 110 volts. Nos. 75 and 375 will withstand a voltage breakdown of 1,000 volts. LAMPS: The No. 75 is designed to house Mazdar 115 volt 6 watt, S6 or C7 candelabra screw base lamps. Will house any other candelabra screw base lamp up to 17%" long and 7%" diameter. The Nos. 175 and 275 are designed to house any miniature lamp up to 1-3/16" long and 7%" diameter. The No. 375 is designed to house any single contact candelabra bayonet base lamp up to 11/2" long and 7%" diameter. COLORS: Amber, Blue, Colorless, Green, Red, White, or Yellow. COLORED DISCS: The No. 75 types are regularly supplied with colorless, smooth glass frosted on back behind which is placed a colored disc. The advantage of this method is that the glass appears white until the lamp is lighted.

OTHER FINISHES OF GLASS	SYMBOL
Faceted (Diamond Cut) Smooth Plain (Smooth face and no frosting) Smooth, frosted on back (Smooth face frosted on back only)	FAC SP SFB

back only) Colored glass is furnished when any of the above types are specified. We recommend smooth plain glass for use with neon glow lamps.

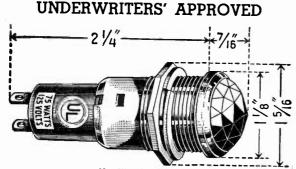
PARTS

Part Number	Description
419V	Socket Assembly for No. 75
224H	Socket Assembly for No. 275
1241	Socket Assembly for No. 175
6241	Socket Assembly for No. 375
75Ā	Jewel
75B	Tube
75C	Nut
75E	Color Disc
75F	Retaining ring for Color Disc
75G	Fibre washer—11/4" O.D.
75L	Lock washer
75N	Spring clip to lock socket in place



1" JEWEL LIGHT ASSEMBLIES LAMPS REPLACEABLE FROM FRONT OF PANEL

No. 75AP TYPE



Net Weight 0.110 lbs.

The No. 75AP is a heavy duty candelabra screw base assembly designed to be used on rugged equipment. The panel hardware (jewel holder) is attractively finished with a highly polished chrome plate. All other parts are cadmium plated. The No. 75AP is Underwriters' approved for 125 volt, 75 watt service. The socket assembly and mounting tube are one piece and so constructed that they need never be replaced. Electrical connections are made to solder terminals. No danger of vibration loosening the connec-tions as with screw terminals.

SPECIFICATIONS

MOUNTING: Mounts in 1" diameter holes on panels up to $\frac{1}{2}$ " thick.

RATING: 125 volts, 75 watts. Can be operated on 220 volt circuits if connected in series with a 2000 ohm, 10 watt wire wound resistor. In this case a 115 volt, 6 watt lamp must be used. Designed to house the Mazda 115 volt, 6 watt, S6, LAMPS:

candelabra screw base lamp.

Will house any other candelabra screw base lamp which has an overall length of less than 1%" and a diameter of less than %". NOTE: Will not house a C7 bulb.

COLORS: Amber, blue, colorless, green, ruby, white or yellow.

FINISHES OF GLASS	SYMBOL
Faceted (Diamond Cut) Smooth Plain (Smooth face and no frosting) Smooth, frosted on back (Smooth face frosted on	FAC SP
back only)	SFB

For Mazda lamps we recommend faceted or smooth glass frosted on back. For neon glow lamps, we recommend smooth plain glass.

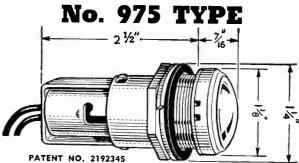
NOTE: If no other finish is specified, faceted glass will be furnished.

PACKING: The units are packed in individual boxes for the jobbing trade; in bulk, and fully assembled for the manufacturing trade.

PARTS

		755
Part No.	Description	75C 75E
475M	Socket Assembly	—— 75F 75G
75Ă 75C	Jewel & Jewel Holder Nut	75L 950E-10
75L	Lock Washer	950E-20

Double Contact Candelabra Bayonet UNDERWRITERS' APPROVED



PATENT NO. 2192345 The No. 975 is a heavy duty double contact, candelabra, bayonet base assembly designed to be used in rugged equipment. The panel hardware (jewel holder) is attractively finished with a highly polished chrome plate. All other parts are cadmium plated. The No. 975 is Underwriters' approved for 125 volt, 75 watt service. The mounting tube and socket are detachable; therefore the wire leads of the socket assembly can be connected to the terminal block before the socket assembly can be connected to the terminal block before the socket assembly is clipped into the mounting tube which is already installed in the panel. This feature facilitates quicker assembly of panels. The built in lead wires can be attached directly to screw or solder terminal blocks; thereby eliminating two soldering operations. Units are carried in stock with both 10 inch and 20 inch leads. On orders of 500 or more units the wires can be cut to your specifications. See wire table.

Part Numbers	Length of Leads	
975-10	10 inches	
975-20	20 inches	

SPECIFICATIONS

MOUNTING: Mounts in 1" diameter holes on panels up to 1/2"

MOUNTING: Mounts in 1" diameter holes on panels up to 1/2" thick.
 RATING: 125 volts, 75 watts.
 LAMPS: Designed to house the double contact, candelabra, bayonet base, C7, S6 or T61/2, 110 volt lamp. Will house any other D C, candelabra based lamp which is no larger than %" in diameter and no longer than 21/6". Lamps can be pur-chased from Drake Manufacturing Co.
 LEADS: No. 18 gauge (16 strands No. 30) with 1/32" of black Synthinol plastic insulation.
 COLORED DISCS: The No. 975 is regularly supplied with color-less, smooth glass frosted on back behind which is placed a colored disc. The advantage of this method is that the glass appears white until the lamp is lighted.
 OTHER FINISHES OF GLASS

OTHER FINISHES OF GLASS	SYMBOL
Faceted (Diamond Cut) Smooth Plain (Smooth face and no frosting) Smooth, frosted on back (Smooth face	FAC SP
frosted on back only)	SFB

Colored glass is furnished when any of the above types is speci-We recommend smooth plain glass for use with neon fied. glow lamps. PACKING: Packed in bulk fully assembled.

PARTS

Part Numbers	Description
75Ā	lewel
75B	Tube
75C	Nut
75E	Color Disc
75F	Retaining ring for Color Disc
75G	Fiber washer 1/16" thick
75L	Lock Washer
950E-10	Socket Assembly for No. 975-10
950E-20	Socket Assembly for No. 975-20

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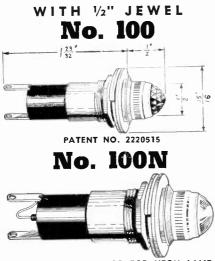


TOTALLY ENCLOSED, MINIATURE BAYONET

ASSEMBLIES PILOT LIGHT

BUILT-IN RESISTORS FOR NEON

These totally enclosed pilot lights meet Underwriters' Specifications. They are very rugged and particularly adapted to use in equipment subjected to extreme vibration and atmospheric conditions. The 100N and 101N assemblies are designed specifically for use with the NE51 neon glow lamp. With proper current limiting resistors (built into the socket of either the 100N or 101N), the neon glow lamps can be operated on any voltage over 65 volts AC and 90 volts DC. You merely specify the operation voltage and we furnish the correct unit. Stock units have 100,000 chm resistors for 115 volt operation. The primary advantages of the glow lamp are its long life (3000 hrs.), resistance to vibration (unaffected), low initial cost, low operating cost (1/25 watt), and small size



HAS BUILT-IN RESISTOR FOR NEON LAMP

The jewel or bull's-eye indicators are recommended for use with incandescent lamps of over one watt; in temperature ambients of over 200° F; or, in the case of neon, where a concentration of light is required directly in front of the observer.

SPECIFICATIONS

MOUNTING: Mounts in 11/16" dia. hole on panels up to 3%"

thick. RATING: Breakdown voltage 2000 volts AC. LAMPS: No. 100 is designed to house any miniature bayonet,

RATING: Breakdown voltage 2000 volts AC. LAMPS: No. 100 is designed to house any miniature bayonet, T3¼ lamp. COLORS: Amber, Blue, Colorless, Green, Ruby, White, and Yellow. NOTE: Blue, Green, and White not recommended for use with neon lamp.

FINISHES OF GLASS	SYMBOL
Faceted (Diamond Cut)	FAC Standard Fin- ish on No. 100
Smooth Plain (Smooth face, no frosting)	SP Standard Finish on No. 100N
Smooth, Frosted All Over Smooth, Frosted on Back Only	SFA SFB

NOTE: SFA and SFB finishes not recommended for neon

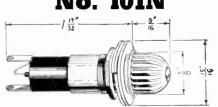
lamps. PLATING: Regularly supplied with burnished nickel plated panel hardware. SPECIAL PLATING: Extra charge for chromium, statuary bronze,

enc. PACKING: To jobbers: individually packed in boxes, 25 boxes to a unit package. To manufacturers: packed in bulk, fully as-sembled. Net wt. 0.057 lbs.

PARTS

Part No.	Description	Part No.
25 27 36L 50B 2100A 2100AN	Jewel Nut Lock Washer Fibre Washer Socket Assembly for No. 100 Socket Assembly for No. 100N	25P 27 36L 50B 2101A 2101AN

WITH PLASTIC DOME No. 101N



WITH BUILT-IN RESISTOR FOR NEON LAMP

101 No.



PATENT NO. 2220515

The transparent plastic cap is fluted on the inside to multiply the images of the glowing electrodes of the neon lamp. It actually has three times the visibility of the ordinary plain cap. Because of the small amount of illumination emitted by the neon lamp, it is advisable to use the dome with 180° visibility to utilize the greatest amount of available light.

Unless otherwise specified, No. 101 (designed for incandescent lamps) is equipped with a translucent cap that affords a beautiful even glow over the whole area of the dome.

SPECIFICATIONS

- MOUNTING: Mounts in 11/16" dia. hole on panels up to 3%" thick.
- thick.
 RATING: Breakdown voltage 2000 volts AC.
 LAMPS: No. 101 is designed to house No. 47 incandescent lamp or any other miniature bayonet T31/4 lamp of less than 1 watt power consumption.
 TRANSPARENT COLORS: Amber, Colorless, Red, and Milky White.
 NOTE: Since the neon glow does not effectively penetrate the transparent Green and Blue caps, they are not carried in stock.
- in stock. TRANSLUCENT COLORS: Blue, Green, Red, Milky White, and

Yellow PLATING: Regularly supplied with burnished nickel plated panel

- hardware SPECIAL PLATING: Extra charge for chromium, statuary bronze,
- etc PACKING: To jobbers: individually packed in boxes, 25 boxes to a unit package. To manufacturers: packed in bulk, fully as-sembled. Net wt. 0.047 lbs.

PARTS Description Plastic Cap

Nut Lock Wash	
Fibre Was Socket Ass	embly for No. 101
Socket Ass	embly for No. 101N
	Copyright by U. C. P., Inc.

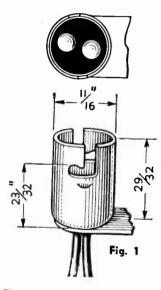


DOUBLE CONTACT CANDELABRA BAYONET

Underwriters' Approved for General Purpose

No. A900 SERIES

UL File No. E17786



This socket assembly is a 110 volt unit designed specifically for use in Underwriters' approved equipment. It has built in lead wires and is sturdily constructed befitting 110 volt application. In spite of its ruggedness it requires less space with lamp installed than does the candelabra than does the candelabra screw type. In addition the bayonet type lamps will not loosen from vibration.

This socket can be supplied mounted to any one of the brackets shown on this page and the next. If they do not meet your requirements, we have the facilities to build them to your specifications.

The A900 type assembly is equipped with No. 18 (16 strands No. 30) tinned copper wire insulated with 1/32" of plastic insulation. See wire table. Units can be wired in series.

The Underwriter's Laboratories have approved the use of this socket with No. 22 gauge wire leads for application in radio only. With the lighter gauge wire the assembly is designated as the No. 900 Series. It can be wired in series or parallel. See wire table.

NOTE: On orders for less than 500 assemblies, no choice of leads is given. Assemblies will be supplied with 10" of black wire stripped $\frac{1}{2}$ ".

LAMPS: 110 volt, 10 watt can be purchased from Drake Manufacturing Co.

FORMULATION OF PART NUMBERS

The part number is composed of three parts, the series number, the bracket number, and the bracket position. The series number is expressed in hundreds plus the letter prefix if there is one. For example: The part number of an A900 Series Socket (fig. 1) with a No. 50H bracket (fig. 4) in the "A" position (fig. 2) would be No. A950H-A. Similarly a unit with No. 22 wire (900 series) and a No. 50J bracket (fig. 5) in the "C" position (fig. 3) would be 950J-C. Part numbers of sockets without brackets are designated as 917, A917, and 1017 respectively.

NOTE: Please do not fail to specify length of lead wire and stripping when ordering more than 500 units.

2 Fig. 2 "C" BRACKET POSITION -Fig. 3 "A" dim. 5/16" "B" dim. 1" No. 50G { No. 50H { "A" dim. 1-1/16" "B" dim. 13/4" No. 50H is recommended for 'A" bracket position bracket position. Fig. 4 No. 50J Fig. 5

MOUNTING BRACKETS FOR 900, A900, 1000

SERIES ASSEMBLIES

"A" BRACKET POSITION



SOCKET ASSEMBLIES FOR ALL STANDARD OR SPECIAL NEEDS

Clip Bracket Types With FLANGE Brackets



103 AE



103 AH





103 CH

Clip Bracket Types With FLAT Brackets



104 AE



217 H





104 CH

Bayonet Type Socket Assemblies



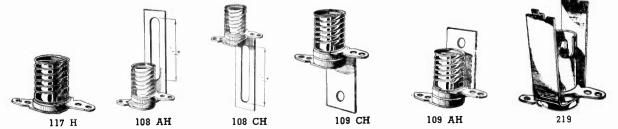






204 AH



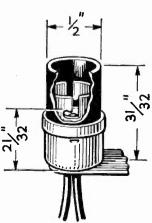




Dial and Jewel PILOT LIGHT ASSEMBLIES

MINIATURE BAYONET LIGHT SOCKET ASSEMBLIES

No. 500 SERIES For Underwriters' Approved AC-DC Radio Receivers



In this socket assembly the bayonet shell is protected from outside contact by a sturdy fishpaper insulating shield. The lead wires are an integral part of the unit and both are secured within the socket so that they will withstand a tension over 25 pounds.

Rounded edges on the opening at the base prevent cut and frayed lead wire insulation.

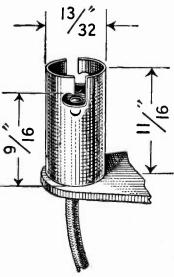
The assembly will withstand a minimum breakdown voltage of 1000 volts between contacts and to ground.

contacts and to ground. All parts are fitted so that there can be no rotation of one part with respect to another. This means that there is absolute ridgidity from the mounting bracket to the bayonet shell which supports the lamp. The center contact cannot protrude from the socket when the lamp is removed.

The standard assembly is equipped with No. 22 gauge wire, however No. 20 wire can be used.

No. 700 SERIES For Underwriters' Approved AC

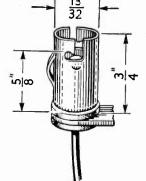
Radio Receivers



In this socket assembly the bayonet shell is electrically connected to the mounting bracket. It is secured in such a way that it cannot rotate. The lead wire is an integral part of the unit and is secured tightly enough to withstand a tension of over 25 pounds. The center contact cannot protrude when the lamp is removed.

The assembly will withstand a minimum breakdown voltage of 1,000 volts between the center contact and ground.

The assembly is customarily built with No. 22 gauge wire; however any other gauge up to and including No. 16 wire can be used.



No. 800 Series

In this socket assembly the bayonet shell is insulated from the bracket. The shell is bridged to provide a good solder connection for one lead wire. The center lead wire is built-in, and the center contact cannot protrude when the lamp is removed. Upon request the assembly can be furnished with two lead wires or no lead wires.

COMMENTS ON ALL ASSEMBLIES ILLUSTRATED HERE

The 500 and 700 types can be wired in series or parallel, but the 800 type can only be wired in series. See wire table for various lengths, color and insulation of lead wires.

NOTE: On orders for less than 500 assemblies, no choice of leads is given. All assemblies will be supplied with 10" of No. 22 plastic insulated wire stripped $\frac{1}{2}$ " long.

The assemblies can be attached to any of the mounting brackets shown in the listing of dial light assemblies. We also have approximately 900 other mounting brackets that are not listed. If you will submit your lighting problem to us, we are certain that we can offer you a satisfactory solution.



Dial and Jewel PILOT LIGHT ASSEMBLIES

SOCKET ASSEMBLIES AND JEWELS

1

1

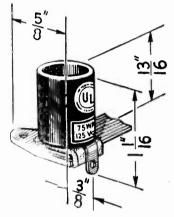
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2

2

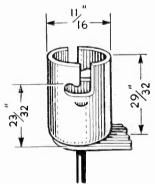
No. 300 SERIES

Candelabra Screw Base Underwriters'Approved for General Use



The No. 300 socket assembly is a candelabra screw socket, Underwriters' approved for 75 watt, 125 volt service. It can be attached to any of the brackets shown in the listing of dial light assemblies. We also have approximately 900 other mounting brackets that are not listed. If you will submit your lighting problem to us, we are certain that we can offer you a satisfactory solution.

No. 1000 Series Single Contact Candelabra Bayonet Automotive Type



This unit is an inexpensive assembly suitably adapted for use in 6 to 115 volt circuits. It has a built in center lead wire and the socket and bracket form the ground connection. The unit is sturdily constructed and designed so that the center contact cannot protrude when the lamp is removed.

This socket can be supplied mounted to any one of the

brackets illustrated with the 900 and A900 socket assemblies. If they do not meet your requirements, we have the facilities to build them to your specifications.

The standard Number 1000 type Assembly is equipped with 10 inches of No. 18 (16 strands No. 30) tinned copper wire insulated with 1/32'' of plastic insulation. See wire table. Assemblies can be wired in parallel.

On orders of more than 500 units No. 22 to No. 16 gauge wire is available.

NOTE: Can be sold knocked down into extruded shell, spring, and pigtail with center contact and washer attached.

1/2" Jewels





SLOTTED TYPE

THREADED TYPE

THREAD TYPE WITH NUTS

6CSP	Shank	³∕a″	long,	16"	O.D.
6 ¹ / ₂ CSP	Shank	1⁄2″	long,	76 <i>"</i>	O.D.

SLOTTED TYPES

2CSP	Shank	1⁄8"	long,	3∕8″	O.D.
3CSP	Shank	3 '' 16	long,	3⁄8"	O.D.
ICSP	Shank	.085'	'long,	3⁄8"	O.D.

JEWELS: Diamond cut (faceted), Amber, Blue, Crystal, Green, Ruby, White (Milk White) and Yellow.

SPECIAL JEWELS: SP—Smooth, plain; SFA—Smooth, frosted all over; SFB—Smooth, frosted back

SPECIAL FINISHES: Chrome, Black Nickel, Statuary Bronze.

11/32" Jewels ... Slotted Types Only

JEWELS: Diamond cut (faceted), Amber, Crystal, Green, Ruby, White (Milk White). Also supplied with smooth plain glass (specify "SP") at same price.

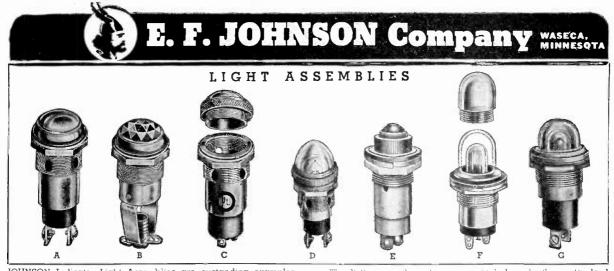
FINISHES: Regular finish Statuary Bronze. Also supplied in nickel finish if so ordered, at same price.

21CSP, slotted type, Shank $\frac{3}{16}$ " long, $\frac{3}{2}$ " O.D. 24CSP, slotted type, Shank $\frac{1}{4}$ " long, $\frac{3}{5}$ " O.D.

1" Threaded Jewel Assembly No. 75A3



Mounts in 1" diameter hole on panels up to ¼" thick by removing washers. The assembly is supplied complete with fibre washer, lock washer, and hex nut. The unit is water tight when mounted to the panel with a rubber gasket.



JOHNSON Indicator Light Assemblies are oustanding examples of sound engineering design, excellent material and careful workmanship. Their use is your assurance of complete satisfaction.

The listings on these two pages include only those standard units in greatest demand but many other types are readily avail-able. Special assemblies can be furnished in production quantities.

Cat.	List	711	Mounting		D. N.	Lamp	J	ewels		Te	rminals	7 1.1	Under-	
No.	Price	Illus.	Hole Size	Behind Panel ⁷	Bulb Shape	Base	Туре	Size	Holder	No.	Туре	Insulation	writer Approved	Color
147-800	\$1.05	В	1″	23/8"	G31/2, T31/4	Min. Screw	Faceted	1"	Friction	2	Solder	Fiber		
147-801	1.05	В	1″	23/8"	G31/2 T31/4	Min. Screw	Smooth	1″	Friction	2	Solder	Fiber		
147-802	1.10	В	1″	23/8"	S6	Cand. Screw	Faceted	1″	Friction	2	Solder	Fiber		
147-803	1.10	В	1″	23/8"	S6	Cand. Screw	Smooth	1″	Friction	2	Solder	Fiber		1
147-804	1.10	B	1″	28/8"	G31/2, T31/4	Min. Bay.	Faceted	1″	Friction	2	Solder	Fiber		OPAL
147-805	1.10	B	1″	23%"	G31/2, T31/4	Min. Bay.	Smooth	1″	Friction	2	Solder	Fiber		0
147-1000	1.40	Ā	1″	21/16"	S6	Cand. Screw	Faceted	1 "	Friction	2	Solder	Porcelain	Yes	z
147-1001	1.40	A	1″	2 1/16"	S6	Cand. Screw	Smooth	1″	Friction	2	Solder	Porcelain	Yes	H
147-1002	1.50	Ā	1″	2%6"	S6	Cand. Screw	Colored Disc ⁶	1″	Friction	2	Solder	Porcelain	Yes	GREEN,
147-1003	1.40	Ă	1″	2%/6"	T41/2, NE45	Cand. Screw	Faceted	1″	Friction	2	Solder	Porcelain	Yes	
147-1004	1.40	Ā	1″	2º 16"	T412, NE45	Cand. Screw	Smooth	1″	Friction	2	Solder	Porcelain	Yes	ц щ`
147-1005	1.50	Ă	1″	2% 16"	T412, NE45	Cand. Screw	Colored Disc ⁶	ı́″	Friction	2	Solder	Porcelain	Yes	BLUE,
147-1032	1.65	A	1 <i>"</i>	234"	S6	Cand. Screw	Faceted]″	Friction	2	Screw	Phenolic	Yes	
147-1033	1.65	Ä	î″	234 "	S6	Cand. Screw	Smooth	1″	Friction	2	Screw	Phenolic	Yes	USE
147-1034	1.75	Ā	1″	284 "	S6	Cand. Screw	Colored Disc ⁶] //	Friction	2	Screw	Phenolic	Yes	
147-1035	1.65	Ă	1″	27/16"	T41/2, NE45	Cand. Screw	Faceted	1″	Friction	2	Screw	Phenolic	Yes	NOT
147-1036	1.65	Â	1″	27/16"	T4 16, NE45	Cand. Screw	Smooth	ן יין	Friction	2	Screw	Phenolic	Yes	Ň
147-1037	1.75	Ă	1″	21/16"	T4 16, NE45	Cand. Screw	Colored Disc ⁶	1 "	Friction	2	Screw	Phenolic	Yes	
147-1050	1.75	A	1″	21/2"	G6	S. C. Cand. Bay.	Faceted	1″	Friction	1	Screw	H. Rubber	100	0q
147-1051	1.75	Ā	ī″	21/2"	G6	S. C. Cand. Bay.	Smooth	1″	Friction	ī	Screw	H. Rubber		z
147-1052	1.85	A	1″	21/2"	G 6	S. C. Cand. Bay.	Colored Disc ⁶	1″	Friction	i	Screw	H. Rubber		NEON
147-1053	1.75	A	1″	21/2"	G6	D. C. Cand. Bay.	Faceted	ĵ″	Friction	2	Screw	H. Rubber	Yes	z
147-1054	1.75	A	1″	21/2"	G6	D. C. Cand. Bay.	Smooth	j ″	Friction	2	Screw	H. Rubber	Yes	¥
147-1055	1.85	A	1″	21/2"	G6	D. C. Cand. Bay.	Colored Disc ⁶	ĵ "	Friction	2	Screw	H. Rubber	Yes	FOR
147-1056	1.75	A	1″	25/8"	G6, NE48	D. C. Cand. Bay. ¹	Faceted	1 //	Friction	2	Screw	H. Rubber	Yes	
147-1057	1.75	A	1″	25/8"	G6, NE48	D. C. Cand. Bay I.	Smooth	1 ″	Friction	2	Screw	H. Rubber	Yes	~
147-1058	1.85	Ā	1″	25/8"	G6, NE48	D. C. Cand. Bay. ¹	Colored Disc ⁶	1 ″	Friction	2	Screw	H. Rubber	Yes	CLEAR.
147-1076	2.00	A	1″	25/8"	G6, NE48	D. C. Cand. Bay. ²	Faceted	1″	Friction	2	Screw	H. Rubber	Yes	し
147-1077	2.00	A	1″	25/8"	G6, NE48	D. C. Cand. Bay. ²	Smooth] ″	Friction	2	Screw	H. Rubber	Yes	
147-1078	2.10	Ā	1″	25/8″	G6, NE48	D. C. Cand. Bay. ²	Colored Disc ⁶	1″	Friction	2	Screw	H. Rubber	Yes	OPAL,
147-1110	1.15	E	11/16"	15/8"	T31⁄4	Min. Bay.	Faceted	1/2 "	Threaded	2	Solder	Phenolic		9
147-1111	1.15	E	11/16"	15/8"	T3¼	Min. Bay,	Smooth	1/2 "	Threaded	2	Solder	Phenolic		
147-1112	1.15	E	11/16"	17/16"	G31⁄2	Min. Bay.	Faceled	$1/_{2}''$	Threaded	2	Solder	Phenolic		BLUE,
147-1113	1.15	E	11/16 "	1 1/16"	G31⁄2	Min. Bay.	Smooth	$\frac{1}{2}''$	Threaded	2	Solder	Phenolic		H
147-1142	1.10	F	11/16"	1 7/16"	T3¼	Min. Bay.	Lucite	5/8″	Threaded	2	Solder	Phenolic	Yes	
147-1143	1.25	F	11/16 "	1 7/16 "	T3¼, NE51	Min. Bay. ^s	Lucite	5/8"	Threaded	2	Solder	Phenolic	Yes	3
147-1144	1.25	F	11/16"	17/16"	T3¼, NE51	Min. Bay.	Lucite	5/8"	Threaded	2	Solder	Phenolic	Yes	A MBER,
147-1200	1.65	C	1″	2%16"	S6	Cand. Screw	Faceted	1 ″	Threaded	2	Solder	Porcelain	Yes	A
147-1201	1.65	C	1″	2%16"	S6	Cand. Screw	Smooth	1″	Threaded	2	Solder	Porcelain	Yes	-
147-1202	1.75	C	1"	2%"	S6	Cand. Screw	Colored Disc [®]	1 ″	Threaded	2	Solder	Porcelain	Yes	GREEN,
147-1209	1.90	C	1"	28/4 "	S6	Cand. Screw	Faceted	1″	Threaded	2	Screw	Phenolic	Yes	2
147-1210	1.90	C	1"	2%/	S6 S6	Cand. Screw Cand. Screw	Smooth	1″	Threaded	2	Screw	Phenolic	Yes	9
147-1211	2.00	C	1"	23/4"	56 T4½, NE45	Cand. Screw Cand. Screw	Colored Disc ⁶ Faceted	1″	Threaded Threaded	2	Screw Screw	Phenolic Phenolic	Yes Yes	RED,
147-1212	1.90	C C	1"	2 ⁷ 16" 2 ⁷ /16"	T452, NE45	Cand. Screw	Smooth	1″	Threaded	2	Screw	Phenolic	Yes	22
147-1213 147-1214	1.90	č	1″	27/16"	T4 ¹ / ₂ , NE45	Cand. Screw	Colored Disc [#]	1"	Threaded	2	Screw	Phenolic	Yes	
147-1214	2.00 1.90	G	1″	115/6"	$T4\frac{1}{2}$ NE45	Cand Screw	Lucite	1"	Threaded	2	Screw	Phenolic	Yes	ĕ
147-1217		G	1″	11/2"	T3¼, NE51	Min. Bay. ⁵	Lucite	1″	Threaded	2	Solder	Phenolic	Yes	COLOR:
	1.60				T412					[U
147-1219	2.10	G	1″	21/16"	G6. NE48	D. C. Cand. Bay. ¹	Lucite	l″	Threaded	2	Screw	H. Rubber	Yes	IFΥ
147-1220	2.25	G	1″	2¼6″	T4½ G6, NE48	D. C. Cand. Bay. ²		1″	Threaded	2	Screw	H. Rubber	Yes	SPECIFY
147-1600	2.00	D	1 ″	21⁄8″	S6	Cand. Screw	Glass	11⁄8″	Threaded	2	Screw	Phenolic	Yes	S I
147-1604	2.00	D	1″	113/16"	G6	S. C. Cand. Bay.	Glass	11/8"	Threaded	1	Screw	H. Rubber		
147-1605	2.00	D	1″	1 13/16"	G6	D. C. Cand. Bay.	Glass	11/8"	Threaded	2	Screw	H. Rubber	Yes	
						1	* 001 0055						a colored	

Requires 30,000 ohm external resistor with NE48.
 Has built in 30,000 ohm resistor for NE48.
 Has built in 200,000 ohm resistor for NE51.
 Has built in 100,000 ohm resistor for NE51, brighter glow but decreased life.
 Itequires 200,000 ohm external resistor for NE51.
 See Colored Disc explanation at right.
 Max. length from front of panel.

* COLORED DISCS—Where this designation (*) appears, a colored plastic disc is placed behind a clear sandblasted (frosted) smooth jewel, to conceal color until lighted. Also prevents external light from giving appearance of bulb being lighted.

In addition, lettering, numerals, or insignia may be printed on a plastic disc back of the jewel, and arranged to be visible either continuously or only after lamp is lighted.

F. JOHNSON Company

BRACKET TYPE PILOT LIGHTS AND JEWEL ASSEMBLIES









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				-					
Cat.	List	Illus-	Hole	Lgth. Behind			Jewe		Calar
No.	Price	tration	Size	Panel	Shape	Base	Type	Size	Color
147-100	\$0.80	Н	1''	11/2"	G31/2, T31/4	Min. Scr.	Faceted (4)	1"	S
147-101	.80	Н	1″	11/2"	G31/2, T31/4	Min. Scr.	Smooth (4)	1''	Р
147-103	.85	н	1''	21 ¹	S6	Cand. Scr.	Faceted (4)	1''	E
147-104	.85	н	1''	21 ¹ 6 ''	S6	Cand. Scr.	Smooth (4)	1''	С
147-106	.85	н	1''	11/2"	G3¼2, T3¼	Min. Bay	Faceted (4)	1''	I
147-107	.85	Н	1''	11/2"	G31/2, T31/4	Min. Bay	Smooth (4)	1''	F
147-200	.60	I	11''	11/4"	G31/2	Min. Scr.	Faceted	5/8''	Y
147-201	.60	I	11''	11/4''	G31⁄2	Min. Scr.	Smooth	5/8''	
147-203	.65	I	11''	11/4"	S6	Cand. Scr.	Faceted	5/8"	С
147-204	.65	I	11'	11/4"	S6	Cand. Scr.	Smooth	5/8''	0
147-206	.65	I	16"	1''	G31⁄2	Min. Bay.	Faceted	5/8''	L
147-207	.65	I	11''	1''	G31/2	Min. Bay.	Smooth	5/8''	0
147-300	.40	I	16	11/4"	G31/2	Min. Scr.	Faceted	1/2''	R
147-301	.40	I	18"	11/4''	G31/2	Min. Scr.	Smooth	1/2''	
147-303	.45	I	18'	11/4''	S6	Cand. Scr.	Faceted	1/2''	Clear
147-304	.45	I	16"	11/4''	S6	Cand. Scr.	Smooth	1/2''	Red
147-306	.45	I	16'	1″	G31/2	Min. Bay.	Faceted	1/2''	Green
147-307	.45	I	16"	1″	G31/2	Min. Bay.	Smooth	1/2''	Amber
147-400	.55	J	11''	11/4''	G31/2, T31/4	Min. Scr.	Faceted (4)	1/2"	Blue
147-401	.55	J] "	11/4''	G31/2, T31/4	Min. Scr.	Smooth (4)	1/2"	Opal
147-403	.60	J	18"	11/2"	G31/2, T31/4	Min. Bay.	Faceted (4)	1/2"	
147-404	.60		11''	11⁄2''	G31⁄2, T31⁄4	Min. Bay.	Smooth (4)	1/2''	
147-406	.55		11''	11/4''	T31⁄4	Min. Bay.	Lucite (4)	5⁄8''	For
147-407	.70		} } ''	11/4''	T3¼, NE51	Min. Bay. (2)	Lucite (4)	5/8''	Neon
147-408	.70]] "	11/4''	T3¼, NE51	Min. Bay. (3)	Lucite (4)	5/8''	DO NOT
147-700	.60		11''	11/4''	G-31/2	Min. Scr.	Faceted	5/8"	Use:
147-701	.60		18"	11/4''	G-31/2	Min. Scr.	Smooth	5/8''	Blue
147-703	.65		11''	11/2''	G-31/2	Min. Bay.	Faceted	5/8"	Green
147-704	.65	н	님''	11/2"	G-31/2	Min. Bay,	Smooth	5/8''	Opal

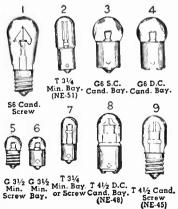
(1) See bulb and base illustrations below.

(2) With 200,000-ohm built-in resistor for NE51.

(3) With 100,000-ohm resistor. Brighter glow reduced lamp life. (4) Bulb removable from front of panel. * See page G-21 for explanation.

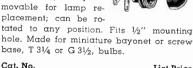
BULB SPECIFICATIONS

Bulbs used on all pilot lights may be identified from these illustrations, but are not included in prices.



PANEL LIGHT

For front panel illumination. Has polished nickel hood, easily removable for lamp replacement; can be ro-

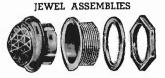


List Price

VARIABLE LIGHT INTENSITY

Pilot lights similar to 147-400, -800, -1110, -1200 can be furnished with either polarized or shutter type variable light intensity jewel holders. Information on request,





WASECA, Minnesota

Colors, all types: Red, Green, Amber, Blue, Opal, Clear.

One-inch jewel, polished chrome bezel, with mounting sleeve to fit 1-inch hole, fiber washer and nut.

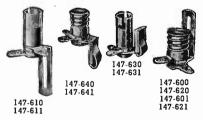
Cat. No. 147-110—Faceted Jewel 147-111—Smooth Jewel 147-112—Colored Disc*	
5%-inch jewel i ed chrome ho }-inch mountin	lder, fits
147-210—Faceted Jewel 147-211—Smooth Jewel	
√2-inch jewel, nickel-plated holder fits 1/2-inch mounting hole. 147-310—Faceted Jewel 147-311—Smooth Jewel	\$0.25
%-inch jewel, nickel-plated holder fits %-inch mounting hole. 147-510—Faceted Jewel 147-511—Smooth Jewel	
V2-inch j nickel- threaded and mou sleeve to f hole.	holder nting
147-410—Faceted Jewel 147-411—Smooth Jewel	\$0.40

SPECIAL TYPES

JOHNSON manufactures a complete line of bracket-type pilot lights and jewel assemblies. Illustrated are only a few of the more popular types. JOHNSON can readily fill your requirements for any type, regardless of specifications.

DIAL LIGHT BRACKETS

Brackets insulated on all types. Many other styles and combinations can be furnished from available tools, also with wire leads.



Cat. No.	Socket	List Price
147-600 Min.	Screw (Bracket)	Down)
147-601—Min.	Screw (Bracket	Up)
147-610Min,	Bay. (Bracket D	own)
147-611Min.	Bay. (Bracket l	Jp)
147-620-Can	1. Screw (Bracke	t Down)
147-621—Can	d. Screw (Bracke	t Up)
147-630 Min.	Bay. (Bracket D	own)
147-631—Min.	Bay. (Bracket l	Jp)
147-640—Min.	Screw (Bracket]	Down)
147-641—Min.	Screw (Bracket	Up)
		-

DO NOT FAIL TO SPECIFY COLOR OF JEWELS. PRICES DO NOT INCLUDE BULBS.



BECAUSE of the vibration conditions under which G-E radio dial lights must operate which G-E radio dial lights must operate, General Electric devotes special care to their design and manufacture. Filaments are designed to vibrate without damage and are secured by a shake-proof joint.

General Electric research is constantly at work to assure the quality and serviceability of G-E radio dial lamps. Shock tests, vibration tests and base torsion tests are used in the laboratory to make certain your customers will get good service from the G-E bulbs you install.

Features like these make it worthwhile for you to sell and install G-E miniature lamps:

- 1. Dependable, trouble-free per-4. Long life. formance. 5. Profitable to bandle.
- 2. High level of maintained light output.
- 3. Low current consumption.



T-31/4 Miniature Bayonet



Miniature Screw

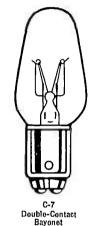


6. Preferred by both dealers and

customers.



Miniature Bayonet





Candelabra Screw

SPECIFICATIONS AND PRICES

Lamp Number	40	41	42	43	*44	45	*46	*47	48	49	51	55	*1490	10C7	10C7DC
Volts	6-8	2.5	3.2	2.5	6-8	3.2	6-8	6-8	2	2	7.5	7.0	3.2	115-25	115-25
Amps	0.15	0.50	0.35	0.50	0.25	0.35	0.25	0.15	0.06	0.06	Max.0.25	Max.0.45	0.16	10 watts	10 watts
#Bulb	T-3¼	T-3¼	T-3¼	T-3¼	T-3¼	T-3¼	T-3¼	T-3¼	T-3¼	T-31/4	G-3½	G-4½	T-3¼	C-7	C-7
Base	Min. Screw	Min. Screw	Min. Screw	Min. Bay.	Min. Bay.	Min. Bay.	Min. Screw	Min. Bay.	Min. Screw	Min. Bay.	Min. Bay.	Min. Bay.	Min. Bay.	Cand. Screw	D.C. Bay.
Bead Color	Brown	White		White	Blue		Blue	Brown	Pink						_
Price	\$0.10 T	\$0.10T	\$0.12T	\$0.10 T	\$0.10T	\$0.12T	\$0.10T	\$0.10T	\$0.157	\$0:15T	\$0.09¥	\$0.09V	\$0.11T	\$0.15T	\$0.22T

Bulbs are designated by a letter to indicate shape and a figure to in-dicate the approximate diameter in eighths of an inch.

Most popular types.

T After price indicates Federal Excise Tax will be billed as a separate item at 6.3% of list price.

V After price indicates Federal Excise Tax will be billed as a separate item at 1,6% of list price.

GENERAL (ELECTRIC

LAMP DEPARTMENT DISTRICT OFFICES

Atlanta 3. Ga. Boston 10, Mass. Buffalo 2, N.Y. Charlotte 2, N. C. Chicago 4, Illinois Cincinnati 2, Ohio Cleveland 14, Ohio Dallas 2, Texas Denver 2. Colorado Detroit 26, Michigan

187 Spring St., N. W. 50 High St. 1 West Genesee St. 516 Johnston Bldg. 230 So. Clark St. 738-9 Union Trust Bldg. 1320 Williamson Bldg. 1801 N. Lamar St. 1863 Wazee St. 1400 Book Tower

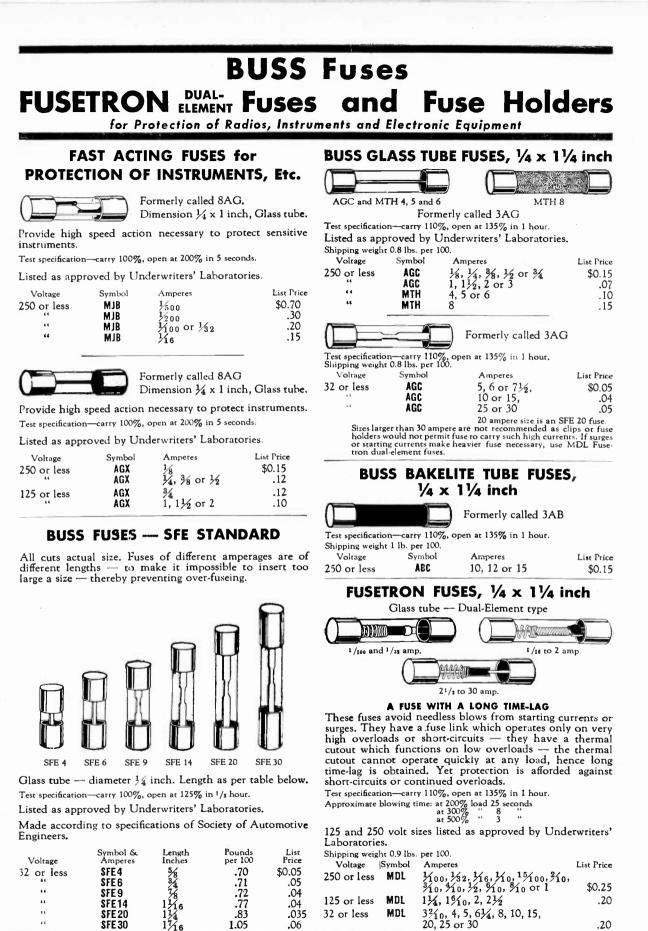
WAlnut 9767 HANcock 1680 **Cleveland 3400** 4-8614 DEArborn 2-4712 DUnbar 2460 CHerry 1010 CEntral 7711 MAin 6141 WOodward 3-6910

N. Kansas City 16, Mo. Los Angeles 13, Cal. Minneapolis 13, Minn. New York 22. N. Y. Oakland 7, Cal. Philadelphia 2, Pa, Pittsburgh 22, Pa. Portland 9, Oregon St. Louis 1. Mo.

200-210 E. 16th Ave. 601 W. Fifth St. 500 Stinson Blvd. 570 Lexington Ave. 1614 Campbell St. 1405 Locust Street 535 Smithfield St. 1238 N.W. Gilson St. 710 N. Twelfth Blvd. General Office: Nela Pork, Cleveland 12, Ohio. GLenville 6600

NOrclay 3568 Mlchigan 8851 GRanville 7286 Wickersham 2-6300 Highgate 7340 Kingsley 5-3336 GRant 3272 BEacon 2101 CHestnut 8920

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BUSS Fuses

FUSETRON DUAL- Fuses and Fuse Holders

for Protection of Radios, Instruments and Electronic Equipment

List Price \$0.02

.05

BUSS FUSE CLIPS for $\frac{1}{4}$ inch Fuses

(SFE 4, 6, 9, 14, 20, AGX, AGC, ABC, MDL, MJB, MTH fuses)



Spring bronze clips are made of Herculoy a bronze of distinctly superior quality for spring clips. This metal gives clips great

gripping strength and ability to retain spring under adverse conditions. Beryllium copper clips combine low elec-

trical resistance with great gripping strength. This means maximum electrical conductivity and results in cooler operation of clips and fuse.

Size of mounting hole; .130 to .135 inch. Center of hole to back-stop; .125 to .135 inch. Min. length of contact surface; 3/32 inch Min. length of contact surface, 3 Maximum height; 1/32 inch Maximum width; 1/32 inch Shipping weight; 3 lbs. per 100 **4548** Spring bronze clip, Nickel plated.

4592 Beryllium copper clip, Silver plated.

BUSS CLIP ASSEMBLIES for 1/4 inch Fuses

(SFE 4, 6, 9, 14, 20, AGX, AGC, ABC, MDL, MJB, MTH fuses)



Clips as described above. Brass terminal. 3/16 inch 6-32 washer head terminal screw. 14 inch 4-40 flat head iron mounting screw. Shipping weight; 1 lb. per 100

4431 includes No. 4548 spring bronze clip, terminal screw, terminal and mounting screw. List Price \$0.40

4432 includes No. 4592 beryllium copper clip, terminal screw, terminal and mounting screw. List Price \$0.40

BUSS FUSE BLOCKS

Bakelite base blocks $\frac{3}{16}$ inch thick. Countersunk mounting holes for No. 6 flat head screws. Brass No. 6 terminal screws. No. 4548 spring bronze clips.



SFE4 45	11 \$0.35	4521	\$0.70	4531	\$1.00
SFE6 45	16 .35	4526	.70	4536	1.00
SFE9 45	17 .35	4527	.70	4537	1.00
SFE14, AGX, MJB 45	14 .35	4524	.70	4534	1.00
SFE20, ABC, AGC, MDL, MTH 345	12 .35	4522	.70	4532	1.00



Small base, Solder **Terminal Blocks**

Three

Pole

List

Price

For Fuses SFE14, AGX, MJB	One Pole 4520	List Price \$0.15	Two Pole 4485	List Price \$0.30	Three Pole 4403	List Price \$0.45
SEEOO ADD ADD \	4405	.15	4408	.30	4411	4 5،15

Other standard fuse blocks and special fuse blocks

If blocks shown do not fit your requirements ask for information on other standard types and sizes.

If special fuse plock is required, send description or sketch, showing type of fuse to be used, number of circuits, type of terminals, etc. We welcome such inquiries.

BUSS FUSE HOLDERS

Make it convenient to mount fuse on any equipment. Changing or inspection of fuse is easy and quick.

Holder has removable knob. Fuse projects beyond body of holder and is not held tight on other end when knob is removed.

Fuse and contacts are protected from dirt and fumes.

Good contact on fuse is made certain by strong coil spring pressure. Poor contact heating that often causes fuse to blow needlessly is eliminated.

Holder bodies are made of black bakelite. All current carrying parts are of brass or copper. Terminals and all contact parts are bright alloy plated.



Panel Mounted Holders for 1/4 inch Fuses

Holders are inserted through hole in panel and are locked in place by nut on holder. They can be used on panels up up to $\frac{5}{16}$ inch thick.

Bayonet type knob requires only quarter turn to remove fuse. No screw driver is needed.



Side terminal is held mechanically as well as by solder. Heat of soldering wire to it will not cause it to loosen or come off.

Vibration will not cause failure of terminals as they are designed to stand severe service.

Neoprene washer and steel locking nut (zinc plated, chromate dipped) furnished with each holder. Wire hole in terminals; .115 inch.

Normal current carrying capacity; 15 amperes. Listed as Approved by Underwriters' Laboratories.

List Price

Listed as Approved by Underwriters Shipping weight; 4 lbs. per 100 HJM for $\frac{1}{4} \times 1$ inch fuses (AGX, MJB, SFE 14) HKP for $\frac{1}{4} \times 1\frac{1}{4}$ inch fuses (ABC, AGC, SFE20, MDL, MTH) \$0.40 .40



IN-THE-LINE HOLDERS for 1/4 inch fuses

These holders are for mounting fuse in wire. Holders consist of body and bayonet type knob — two terminal contacts ready to be crimped on ends of wire — a pressure spring that is used under contact in base of holder.

Holders can also be mounted in panel up to $\frac{5}{16}$ inch thick by means of a No. C-1437-018-27 Tinnerman nut (Nut not furnished). Flat spot on holder permits it to be locked against rotation.

Normal current carrying capacity: 15 amperes. Shipping weight, holders: 4 lbs. per 100.

Type

- List Price HDI for 1/4 x 1 inch fuses (AGX, MJB, SFE 14) \$0.20 Takes No. 18 or smaller wires.
- HDJ-A for 1/4 x 11/4 inch fuses (ABC, AGC, MDL, MTH, SFE 20) .20 Takes No. 18 or smaller wires.
- HDJ-B for $\frac{1}{4} \ge 1\frac{1}{4}$ inch fuses (as above) Takes No. 14 or 16 wires. .20

LITTELFUSE "Quicker than a Short Circuit"

8AG INSTRUMENT high speed LITTELFUSES

Locked Cap Assembly and other exclusive Littelfuse features for protection of delicate test equipment, galvanometers, microammeters, milliammeters, voltmeters, etc. Glass-enclosed: $1 \times J_4^{(0)}$ dia., accurately rated, high speed action, short time lag. Voltage ratings up to 250 V., AC or DC. For higher voltages use fuses in series.



				APPLICATIONS		APPLICATIONS			
Catalog No.	Former No.	Amp. Rating	Max. Volt.	Res. @ 5 m.a.	Volt- meters Ohms P.V.	All Magnetic Movement Milliammeters	Thermo- couples	List Price Ea.	
361.005	1000	1/200	250	480.	Over 1000	Galvanometers	Up to 0-5	\$0.30	
361.010	1001	1/100	250	160.0	1000	Up to 0-1	0-5 to 0-10	.20	
361.031	1002		250	40.0	500-100	0-1 to 0-10	0-10 to 0-25	.20	
361.062	1003	1/c	250	5.0	100-500	0-10 to 0-25	0-25 to 0-60	.15	
361.125	1004	1/2	250	2.0	20-100	0-25 to 0-75	0-75 to 0-150	.15	
361.250	1005	1/4	250	3.5	10-20	0-75 to 0-150	0-115 to 0-200	.15	
361.375	1006	8%	250	3.0	5 - 10	0-150 to 0-250	0-200 to 0-300	.15	
361.500	1007	12	250	2.0	3-5	0-250 to 0-350	0-300 to 0-400	.15	
361.750	1007-A	1 16 1 16 1 4 3 /8 1 /2 8/4	250	2.0		0-350 to 0-500	0-400 to 0-600	. 15	
361001.	1008	1	250	.24		0-500 to 0-750	0-600 to 0-1000	.10	
36101.5	1008-A	11/2	250	.13		0-750 to 0-1000	0-1000 to 0-1500	.10	
361002.	1009	2	250	.10		0-1000 to 0-1500	0-1500 to 0-2000	.10	
361003.		3	32	.043		0-1500 to 0-2000	0-2000 to 0-3000	.10	
361005.		5	32	.030		0-2000 to 0-4000	0-3000 to 0-5000	.10	

UNDERWRITERS' APPROVED 3 AG "LITTELFUSES"-250 Volts







"SLO-BLO"-thru ¼ Amp. ST

Littelfuse is the first manufacturer to receive Underwriters' approval of 3 AG fuses $(1\frac{1}{4})^{\prime\prime\prime}$ $x \frac{1}{4}$ dia.) in current ratings over 3 amps. at 250 volts. Following list gives standard approved ratings carried in stock. However, the Underwriters' approval to Littlefuse is a blanket approval from $\frac{1}{4}$ to 6 amps. Intermediate ratings can be furnished without separate approval, at a small extra charge. Littlfuse name, the amperage and

Cat.	Former	Amp.	Ohms	List Price,
No.	No.	Rating	Res:	Each
313.010* 313.032*		1/100	33.50 3.90	\$0.25 .25
313.062 313.125	1262 1263	1/16	90 29	.25
313.187	1263-A	3/16	20	.25
313.250	1264	1/4	9.6	

				1
Cat. No.	Former No.	Amp. Rating	Ohms Res.	List Price, Each
312.500	1046	1/2	3.1	\$0.15
312.750	1047	1/2	1.9	.15
312001.	1040	1	.24	.07
31201.5	1041	11/2	.15	.07
312 002.	1042	2	.10	.07
312003	1043	3	.06	.07

Cat. No.	Former No.	Amp. Rating	Ohms Res.	List Price, Each
312004.	1357	4	.046	\$0.10
312005.	1358	5	.034	.10
312006.	1359	6	.030	.10

Std. Pkg. 100, wt., 11/2 lbs.





Smallest, highest rated Underwriters' Laboratory approved fuses made. Bakelite-enclosed, arc-quenching, powder-filled fuses. Medium time lag.

STANDARD-1/2 to 3 Amp. SLEEVE TYPE-4 to 8 Amp.

voltage rating must appear on the fuse caps of approved-fuses. Many new fields are opened up by the extension of approval from 3 to 6 amps., where formerly bulky cartridges or plug fuses and their mountings were used. This applies specially to electrical appliances, heavy duty power supplies, amplifiers, radios, communication equipment, electronic devices, motors, etc.

Ratings thru 1/4 Ampere-250 Volts

"Slo-Blo" fuses with high time lag—for circuits with equipment having high inductive or capacitative surges, heavy starting currents and intermittent-duty circuits. Anti-fatigue construction—compound element with spring and resistor.

Ratings 1/2 thru 3 Amp.—250 Volts

Quick-acting Standard Littelfuses with low time lag. Protective-coated elements prevent oxidation, promote clean fusion break. Diagonal element for accurate alignment, calibration.

Ratings 4 thru 6 Amp.—250 Volts

Standard, quick-acting Littelfuses with diagonal elements. Low time lag—quick-acting. Std. Pkg. 100—wt., 1½ lbs. *Not Und. Approved.

Catalog No.	Former No.	Amp. Rating	List Price, Each
314008		8	\$0.15
314010	32155	10	.15
314012	32156	12	.15
314015	32159	15	.15
314020	32160	20	.15

METER BACK MOUNTING



Cat. No. 383002 (1059)— Mounts directly on meter binding post. Will not touch other posts on smallest standard meter. Linen bakelite base 1" x 116" . Length

FUSE MOUNTINGS (3AG)

Hinged Cover Type

(Meets Underwriters' Requirements)

Cover fibre-lined. Metal shielded cover hinged to bakelite base. Terminal mounting extends through insulated base. Nut lightly staked to cover to prevent loss. Requires $1\%''_{\%} \times 1\%''_{\%}$ knockout hole in panel.



Two 6-32" x $\frac{1}{2}$ " nounting studs at $2\frac{1}{8}$ " centers. Base $2\frac{1}{2}$ " x $1\frac{1}{4}$ ". $\frac{3}{4}$ " high above panel. Std. Pkg. 20.

Cat, No.	List Price Each
351009 (1237A)-Double	Pole\$0.75
351005 (1379)-Single P	ole

NEON TESTERS

Low Voltage tester (illustrated) for 5 to 50 V AC or DC. For automotive, heating and vent., telephone, aircraft, battery service, radio service (low volt. filament circuits, "A" batteries), for testing polarity. Tenineh leads with alligator clips. Full directions.

No. 202002 Low Volt. Tattelite tester (5420).

List Price, Each \$1.50



High Voltage "Tattelite" tester (not shown) 60-500V AC, 90-500V DC. Molded casings, insulated test prods—unusually sensitive. For testing live lines, polarity, for detecting blown fuses, open circuits, grounded wires, approximate voltage (110, 220, 440, etc.). Detailed instructions.

No. 201002 High Volt. Tattelite tester (5076)

List Price, Each \$1.00

"POST-LITE"



Neon indicating light for radio, television, radar control panels and other electrical equipment. For 65-130V AC, 90-130V DC. For 230V, 100,000 Ohm resistor may be added. Molded, clear plastic—head, $\frac{5}{8}''$ square, overall length $2\frac{1}{2}\frac{4''}{2}$. Under panel length $1\frac{1}{2}\frac{4''}{2}$ clearance hole. Wt. 11 gms. Std. pkg.—100.

No. 201005 Post-Lite List Price, Each \$0.80



4 AG Aircraft Fuse showing reinforced twisted element

20A 32 V

Bakelite-enclosed 4 AB Fuse

AIRCRAFT LITTELFUSES-ANTI-VIBRATION TYPE

Especially designed for Aircraft Service. Characteristics: High Mechanical Strength—

Resistance to Fatigue-Long Vibration Life

CONSTRUCTION: Glass-enclosed. Littelfuse Locked Cap Assembly (no cements) prevents loosening of cape. High visibility transparent label for amper-age. Elements mechanically depolarized by twisting at 90° (see illustrations) are braced against extreme vibration. "Gooseneck" non-crystallizing fuse element takes up expansion and contraction. Ratings 5 amps, or less use Spring and Link. Service life six times simple wire. The 4 AG and 5 AG sizes are supplied for Aircraft Services for their strength and greater carrying capacity than 3 AG fuses. than 3 AG fuses.

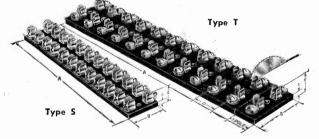
BAKELITE-ENCLOSED: 4 AB and 5 AB fuses recommended where severe overloads might shatter glass.

CURRENT RATING: Rated to NEC specifications to carry 10% overload indefinitely, to blow on 35% overload within 1 hr., and 100% overload within 2 min,

VOLTAGE RATING: Voltage at which fuses will break without arcing over, or bursting under short circuit conditions.

VIBRATION FACTOR: Minimum hours these fuses endure our Magnetic Vibrator operating 120 cycles a second, while carrying the rated current. Acceleration is 10 times the worst field conditions.

ibra- tion		4AG "LITTELFUSES" $1\frac{1}{24}$ ", $\frac{9}{26}$ " Dia. Unit Wt3.5 Gms.					4AB "LITTELFUSES" 1½″ x ⅔2″ Dia. Unit Wt.—3.75 Gms.				5AG "LITTELFUSES" 1½″ x ¹³ ⁄ ₆ ″ Dia. Unit Wt.—8.5 Gms.							
Factor	Cat. No.	Former No.	Amp. Rating	Max. Volt.	Ohms Res.	Price, Each	Cat. No.	Former No.	Amp. Rating	Max. Volt.	Ohms Res.	Price . Each	Cat. No.	Former No.	Amp. Rating	Max. Volt.	Ohms Res.	Price, Each
$\begin{array}{r} 100 + \\ 100 + \\ 100 + \\ 500 + \\ 500 + \\ 500 + \\ 500 + \\ 500 + \\ 500 + \\ 500 + \\ 500 + \\ 500 + \\ 500 + \\ 500 + \end{array}$	'Slo-Blo'' 413001. 413002. 413003. 413005. Aircraft 411010. 411015. 411020. 411025. 411030. 411035. 411040.	1091C 1092C 1093C 1094C 1095 1096 1097 1098 1099 	1 2 3 5 10 15 20 25 30 35 40	250 250 32 32 32 32 32 32 32 32 32 32 32 32	.71 .094 .059 .023 .016 .010 .008 .007 .006 .004	\$0.25 .25 .25 .33 .13 .13 .13 .13 .13 .13 .20	414001. 414002. 414003. 414005. 414015. 414015. 414025. 414025. 414035. 414035. 414035. 414040. * Good f 400 cycles.	1091B 1092B 1093B 1094B 1095B 1096B 1096B 1097B 1098B 1099B 1100B	1 2 3 5 10 15 20 25 30 35 40 supplies of	250 250 115 * 115 * 125 * 32 32 32 32 32 32 32 32	.39 .16 .055 .041 .012 .008 .007 .007 .007 .007 .003 KVA at	\$0.25 .25 .25 .25 .25 .25 .25 .25 .25 .25	"Slo-Blo" 513001. 513002. 513003. 513005. Aircraft 511010. 511020. 511025. 511030. 511030. 511040. 511060.	1160C 1161C 1162C 1163C 1164 1165 1166 1442 1166 1442 1168 1169 1222	$ \begin{array}{c} 1\\2\\3\\5\\10\\15\\20\\25\\30\\35\\40\\50\\60\end{array} $	250 250 32 32 32 32 32 32 32 32 32 32 32 32 32	.88 .24 .18 .05 .039 .013 .013 .013 .013 .008 .010 .009 .010	\$0.25 .25 .25 .15 .15 .15 .15 .15 .15 .15 .15 .15 .1



NEW FUSE MOUNTING PANELS

Open type fuse panels, stocked in 12-pole units as shown—we cut them to 1, 2, 3, 4 or more poles as ordered, or you may cut them in your plant (1/8" allowance for saw cut).

Fuse Type	Mtg. Type	Dim. "B"	Dim. "C"	Dim. "D"	Dim. "E"
8AG 3AG	S S	138	\$/16 3/4	5/8	21/2
3AG 4AG	T T	23/8 23/8	7/52	29 32 29	11 16 18 16
5AG	T	23⁄4	9 32	9/82	35/32

Mountings with Solder Terminals—Type "S". Phosphor-Bronze, bright-dipped finish "Lug-Clips" are firmly anchored to black Bakelite base—have non-turn-ing anchors. For 8AG and 3AG size fuses.

Mountings with Screw Terminals—Type "T". Spaced to U/L requirements for equipment circuit protection. Nickel plated brass screw terminals, nickel plated fuse clips. Type 356 (3AG) and type 556 (5AG or Midget) have cupped wire-retaining washers under terminal screws as required by U/L. Type 456 (4AG) has lock washers or terminals.

FOR 3AG FUSES-TYPE "T"

Catalog No.	No. Pol e s	Dim. "A"	List Price Each
356001	1	25/82	\$0.35
356002	2	11/16	0.70
356003	3	219/32	1.05
356001	4	31/2	1.40
356005	5	413/2	1.75
356006	6	53/16	2.10
356007	7	67.32	2.45
356008 L	8	$7\frac{1}{8}$	2.80
356009	9	8132	3.15
356010	IÕ	815/16	3.50
356011	11	927 42	3.85
356012	12	1034	4.20

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FOR 4AG FUSES-TYPE "T"

FOP	346	EIICEC_	TVDE	440.44

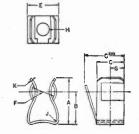
Catalog No.	No. Poles	Dim. "A"	List Price, Each	Catalog No.	No. Poles	Dim. "A"	List Price Each
456001	1	25/32	\$2.40	357001	1	1/	\$0.15
456002	$^{2}_{3}$	111/16	-75	357002		1 1 1 1 8 1 8 4 2 3 8 3	.30
456003	3	219/2	1.10	357003	2345678	1.8/	.45
456004	$\frac{4}{5}$	$3\frac{1}{2}$ $4\frac{13}{32}$	1.45	357004	4	232	.60
456005	5	418/22	1.80	357005	5	3 28	.75
456006		55/16 67/32	2.15	357006	6	35%	.90
456007	7	67/2	2.50	357007	7	11/	1.05
456008	8	7%	2.85	357008	8	35/8 414 478 512 634	1.20
456009	9	81/32 815/32 927/32	3.20	357009	9	516	1.35
456010	10	815/22	3.55	357010		61%	1.50
456011	11	927 2	3.90	357011	10 11	63/	1.65
456012	12	103/4	4.25	357012	12	73/8	1.80
FOR	5AG FUS	ES-TYP	E "T"	FOR 8	BAG FUS	ES-TYP	E "S"
556001	1	27/2	\$0.50	387001	1	1/2	\$0.15
556002	$\frac{2}{3}$	113/15	.95	387002	2	$\frac{1}{2}$ 1 $\frac{1}{8}$ 1 $\frac{3}{4}$ 2 $\frac{3}{8}$ 3	.30
556003	3	$\frac{2^{25}}{3^{32}}$	1.40	387003	$\frac{2}{3}$	18/	.30
556004	4	33/4	1.85	387004	4	23%	.60
556005	ő	423/20	2.30	387005	$\frac{4}{5}$	3	.75
556006	6	511/2	2.75	387 006	6	35/8	.90
556007	7	621/32	3.20	387007	7	41/4	1.05
556008	8	75/8 8 ¹⁹ /32	3.65	387008	8	4 1/4 4 7/8	1.20
556009	9	819 32	4.10	387009		$5\frac{1}{2}$	1.35
	10	99,15	4.55	387010	10	61/8	1.50
56010		0 / R0					
556010 556011 556012	11	10^{17} 32 11 1 2	5.00	387011 387012	11	634	1.65

LITTELFUSE BERYLLIUM COPPER AND PHOSPHOR BRONZE FUSE CLIPS

TELFUS



Littelfuse fuse clips are available in three standard styles: "X," with "ears" or fuse stops; "XX," earless; and "XXX," "Lug-Clips," a new Littelfuse clip having a lug or solder terminal made as an integral part of the clip. All styles are furnished in either Phosphor-Bronze or Beryllium Copper.



Short Circuit"

"Quicker than a

						DIM	ENSIO	NS			Unit Wt.	Std. Pkg. 100	
	Former Number	Fuse Adaptation				С	Е	F	F G H		grams	Wt.—lbs.	Each
		SILVE											1 CO 05
123001 125001 127001	1216B 1217B 1218B 1219 1221	4AG & 4AB Fuses. 5AG, Hi-Voltage-Midget N.E.C30 Fuses.	X	29 64 9 16 8 4 1 3 16 1 7 22	1/4 8/8 1/2 9/16 13/16	⁵ /16 13/32 7/16 19/32 .750	.385 15/22 5/8 7/8	9 12 13 12 9 16 13 16	3/16 7/52 1/4 5/16	.131 .171 .196 .203 .265	$1 \\ 1.6 \\ 3 \\ 5.5 \\ 14.5$	$\begin{vmatrix} 1\\1\\2\\2\\4 \end{vmatrix}$.08 .15 .18
			SILVER PL	ATED-	-EARLE	SS TYP	E						
123002 125002 127002	1417 1437 1475 1476	4AG & 4AB 5AG, Hi-Voltage-Midget N E C -30 Fuses	XX XX	29 64 9 16 8 4 13 16 1 7 52	14 3/8 1/2 9/16 13/16	5/16 13,82 7/18 19,52 .750	11/22 .385 15/32 5/8 7/8	1/4 9/52 13/52 9/16 18/16	5/12 8/16 7/32 1/4 5/16	.131 .171 .196 .203 .265	$ \begin{array}{c c} 1 \\ 1.6 \\ 3 \\ 5.5 \\ 14.5 \end{array} $	1 1 2 2 4	.08
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $													
123004	New	SFE, 3AG, AB, & 8AG	XXX XXX	29 /64 9/16		37 /4	.385		5/2	.171	1.7		.12
		P	нозрно	OR B	RON	ZE CL	IPS						
		BURNISHE	NICKEL I	LATE-	-with	FUSE S	тор "	EARS"					
103001 105001 107001	1319 2048 5048	4AG & 4AB 5AG, Hi-Voltage-Midget N E C -30 Fuses		9/16 8/4 13/16	14 3/8 1/2 9/16 13/16	19/2	156	9/32 13/32 9/16	5 12 1 16 7 12 1 4 5 16	.173 .196 .203	1.7 3.2 5.8	22	.0- .0!
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $													
104002 105002	2049B	4AG & 4AB 5AG Hi-Voltage-Midget	XX	9/16	14 3/8 1/2 9/16	13/82	15/2	14 9 12 13 12 9 16	3/16	.173	1.7	1 2	0.
		BRIGHT-DIP PHOSPHO	R BRONZE	LUC	G CLIP	' SOLD	ER TER		ATTA	CHED			
103003		AAC & AAR	XXX	9/16	14 3/8 1/2	³⁷ /64 19/52 5/8	.385	14 9/32 13/22	5/32 3/16 7/32	.171	1.7	1	1 .0





"LITTELFUSE" FUSE EXTRACTOR POSTS

Quicker, safer method for mounting and changing fuses. Held in end of removable knob, fuse is easily replaced by unscrewing knob. Available with finger-operated knob, screw driver slot knob, and finger operated with keep chain.

Catalog No.	Former No.	Descr.—Knob, How Operated	Mtg. Hole	Length Under Panel	Wt. Granis	List Price Each
341001 342001 371001 372001 442002 442001	1075S 1075F 1087S 1087F 1212D 1212B	3AG-Screw Driver 3AG-Finger 8AG-Screw Driver 8AG-Finger 4AG-Finger, Pressurized 4AG-Finger	.495" dia.* .495" dia.* .495" dia.* 5%"_dia.—Rd.	2 ³ /2 2 ⁷ /2 2 ⁷ /2 2 ⁷ /2 2 ⁷ /8 2 ¹³ /6	$15.0 \\ 14.3 \\ 15.3 \\ 14.3 \\ 45.3 \\ 24$	\$0.45 .45 .45 3.00 .70
	1	*With flat .224" from C.L.	†With flat .250"	from C.L.		

Conant Instrument Rectifiers

"STANDARD SINCE 1933"

DIMENSIONS SERIES 500 SERIES 190 SERIES 180-C SERIES 1

INTERNAL CIRCUITS

		Body	Internal		Number of	Weight		Dim	ensions (Inc	hes)		Net
	Туре	Color	Circuit	Mounting	Terminals	(Grams)	A	в	C	D	E	Price
	(M	YELLOW	1	6-32 STUD	4	12.718	.890	.500	.485	.800	.315	\$2.10
CEDIES	TH	BROWN	2	6-32 STUD	4	11.833	.890	.500	.479	.800	.321	1.86
SERIES 500	{ HS	BLACK	3	6-32 STUD	3	10.631	.890	.500	.445	.800	.355	1.53
500	T	RED	4	6-32 STUD	3	10.631	.890	.500	.445	.800	.355	1.53
	н	GREEN	5	6-32 STUD	2	9.072	.890	.500	.400	.675	.275	1.20
	(B	YELLOW	1	#2 SCREW	4	2.531	.690	.590	.375	.250	.250	2,10
	BTH	BROWN	2	#2 SCREW	4	2.183	.690	.590	.375	.250	.250	1.86
SERIES	(BHS	BLACK	3	#2 SCREW	3	1.824	.690	.590	.375	.250	.250	1.53
160	BT	RED	4	#2 SCREW	3	1.824	.690	.590	.375	.250	.250	1.53
	Гвн	GREEN	5	#2 SCREW	2	1.477	.690	.590	.375	.250	.250	1.20
	B-C	YELLOW	1	FUSE CLIP	4	1.743	.345	.297	.310	.220	.200	2,10
	BTH-C	BROWN	2	FUSE CLIP	4	1.650	.345	.297	.310	.220	.200	1.86
SERIES	BHS-C	BLACK	3	FUSE CLIP	3	1.385	.345	.297	.310	.220	.200	1.53
160 · C	BT-C	RED	4	FUSE CLIP	3	1.385	.345	.297	.310	.220	.200	1.53
	BH-C	GREEN	5	FUSE CLIP	2	1.293	.345	.297	.310	.220	.200	1.20

- \star Righest rectification efficiency for greatest instrument sensitivity.
- ★ Exceptional stability insures permanent instrument calibration.
- * Exclusive Conant Complete Color Code simplifies identification of type and terminal polarity.
- ★ Lead wires WELDED to terminals.
- * Sealed against moisture to insure permanent characteristics.
- ★ The only rectifiers with a NO-TIME LIMIT guarantee.
- * Manufactured by the exclusive Conant process from domestically produced materials only.

Instrument Rectifiers

- ★ Life tests in continuous operation since June 1, 1934 prove Conant rectifiers do not deteriorate with age or continued normal service.
- \star Sold by leading radio jobbers everywhere. Consult your local jobber, or your nearest Conant Representative.

SERIES 500 UNITS are for general applications requiring greater output current for meters, relays or other apparatus requiring more than 1 milliampere. Recommended for all such applications at commercial and the lower audio frequencies. Will also operate up to 1,000, 000 c.p.s. in special applications wherein accuracy of readings is not essential.

SERIES 160 and 160-C are for applications requiring good frequency response over the entire commercial and audio range and especially when the meter, relay or other apparatus requires less than 1 milliampere for operation. In some special applications these units may be operated at frequencies up to 75.000,000 c.p.s. with special circuit treatment.

SPECIAL TYPES are available in both series 500 and 160-C. When requesting a quotation on a special type include a sketch of the rectifier required or a circut dia-

LABORATORIES

gram showing source and frequency of the input voltage, resistance and kind of load, required load current and the ambient temperatures.

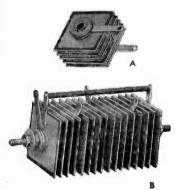
SERIES 500 Disc diameter .500 inch. Area each disc .15 square inch. Furnished with 3" braided, tinned copper leads. Finished in synthetic lacquer-enamel.

SERIES 160 Disc diameter .160 inch. Area each disc .02 square inch. Furnished with 3" stranded, tinned thermoplastic covered copper leads. Molded phenolic case. Assembly sealed with specially developed moisture-proof compound.

SERIES 160-C Disc diameter .160 inch. Disc area, lead wire and length and moisture-proof seal are identical with Series 160. Dimensions of the case have been reduced to the most compact size. These units may be mounted in a standard midget fuse clip.

20 Vesey St., New York 7, New York 1836 Euclid Ave., Cleveland 15, Ohio 600 S. Michigan Ave., Chicago 5, III. 518 City Bk. Bldg., Kansas City 8, Mo. P.O. Box 201, Crosstwn. Sta., Memphis, 4, Tenn 1212 Camp St., Dallas 2, Texas 4018 Greer Ave., St. Louis 7, Mo. 711 Colorado Bldg., Denver 7, Colo. Bendix Bldg., 1206 Maple Ave., Los Angeles 15, Calif. Export Div., 75 West St., New York 6, N.Y. Canadian: 50 Yarmouth Rd., Toronto. Ont.

S E L E N I U M R E C T I F I E R S



Above (A) Model RS-100. Designed for radio and low power applications. Rated at 115 volts A.C., 100 milliamperes D.C., but also made for higher voltages and current.

Above (B) SE-11 Series. Power rectifier stacks rated from 0.100 amperes up. Plate size from $1'' \times 1''$ up to 5'' x 6''.

Bradley selenium rectifiers for medium voltage applications are processed to allow good efficiency and stability at D. C. rating up to 24 volts per plate. For power applications, square plates allow a maximum of rating to space factor.

For high voltage applications, Bradley selenium rectifiers are rated up to 70 volts peak inverse per plate.

Bradley manufactures selenium rectifiers for operation from a few microamperes to many thousands of amperes and from fractions of a volt to thousands of volts. On any rectification problem, consult Bradley. With their long application experience, Bradley engineers can quickly specify the right rectifier for your requirements.

COPPER OXIDE RECTIFIERS

THE BRADLEY LINE



In above Universal Instrument Rectifier, you have a single answer to a wide range of measurement rectifier requirements — one rectifier for all circuits with A.C. voltages and D.C. currents within the unit's rating. Rated up to 12 volts A.C., 5 ma. D.C.

BRADLEY "COPROX" INSTRU-MENT RECTIFIERS have vacuum processed pellets with gold contacts.

Exhaustive laboratory and field tests have proved our process produces rectifiers with maximum efficiency and minimum temperature errors. Even under severe condiditions of use, aging is practically eliminated.

Electrical instruments with better accuracy are being built with "Coprox" rectifiers.

BRADLEY "COPROX" POWER RECTIFIERS, designed for low voltage applications, are rugged, compact and conservatively rated. Long service life is combined with low operating cost.

Bradley manufactures copper oxide rectifiers for operation from a few microamperes up to one ampere, and from microvolts up to hundreds of volts. All "Coprox" rectifiers are matched and balanced over a wide temperature range.

PHOTO ELECTRIC CELLS



The pigtail contact model 3-1A shown above is only one of a series of standard mountings. Others include housed models with plug-in contacts, for tube socket and nutand-bolt types. Shapes of Bradley Luxtron* photocells vary from circles to squares, with every in-between shape desired. In size they range from the diminutive to the largest sizes required. Dimensions of the standard model illustrated are 2-3/16" x 2-5/16" x 27/64".

LUXTRON PHOTOCELLS EFFICI-ENTLY CONVERT LIGHT INTO ELECTRIC ENERGY WITHOUT ANY EXTERNAL POWER SOURCE. The energy developed is sufficient to operate meters and sensitive relays.

Light-weight, rugged and true to rating, these photocells give long life under the most strenuous operating conditions. As far as we have been able to determine, they are the finest on the market, although among the lowest in price.

For precision control of light with electric energy, specify Luxtron photocells. Write Bradley for samples and engineering assistance on any photocell problem you have in mind.

*T.M. Reg. U. S. Pat. Off.

BRADLET UM

Write for your copy of "The Bradley Line", booklet showing many additional rectifier and photocell models. **BRADLEY** LABORATORIES, INC. 82 MEADOW STREET, NEW HAVEN 10, CONN.

Low-Capacity **RECTIFIER UNITS**

Used by most leading test set manufacturers as original components in their equipment.

*Trade Mark Reg. U. S. Pat. Off.

Full and half wave, low-capacity copper oxide rectifiers for instruments, test sets and similar applications. Electrox Rectifiers are made by a pioneer manufacturer of highquality, dry disc rectifiers. Each type is specially adapted to meet the individual requirements of the user; each unit is individually inspected, tested, and guaranteed right. For dependability, get genuine Electrox Rectifiers!



CAT. NO. 5017

Max	. Continuou	s Rating							
D.C. M.A.	D.C. Volta	A.C. Rms. Volts	Circuit Diagram Fig.	Element Diam, Inches	No. of Elements	Connections	Lead Length Inches	Туре	Cat. No
1	1	1.5	3	1/8	4	4 leads	4	AA-4	5064
5-	3	-1	3	3/16+	4	4 leads	3	A-4	5020
13		3	1	1/16	1	2 leads	3	B-1	5048
13		4	4	7- <u>16</u>	2	3 leads	3	B-2	5047
13		3*	2	7/16	2	3 leads	3	B-2	5049
20	3	4	3	7/16	4	5 leads	3	B-4	5016
32		3	1	3/4	1	2 lugs		C-1	5011
32		3*	2	3⁄4	2	3 leads		C-2	5057
32		3*	5	3/4	2	4 lugs		C-2	5010
64	3	4.1	3	3/4	4	5 lugs		C-4	5014
64	3	4.1	3	3/4		5 leads	3	C-4	5017

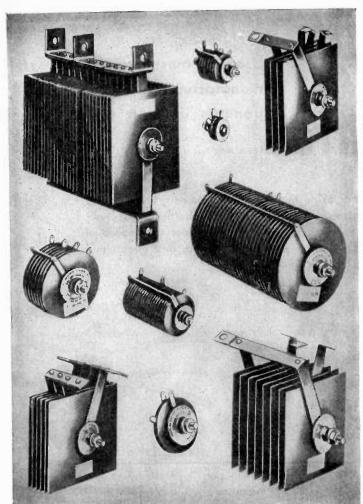
*3 volts A.C. per element.

t's fa'' square.



RECTIFIER VISION

SCHAUER MACHINE ΤΗΕ CO. Cincinnati, Ohio Makers, since 1930, of high-quality, dry disc rectifiers.



-Seletron-

SELENIUM RECTIFIERS

Built on Aluminum

THE high standards of performance established by Seletron Selenium Rectifiers have won for them nationwide acceptance by electrical manufacturers, purchasing agents and electrical engineers in the power and radio fields.

In every type of AC to DC conversion, from the large power stacks to the small units applicable to the radio and television fields, Seletron Rectifiers assure dependable, trouble-free service and long life under severest operating conditions.

These precision-built rectifiers are engineered for compactness and maximum heat dissipation. Although light in weight they are strongly constructed.

Furnished in eight standard plate sizes in assemblies that provide cutputs ranging from a few milliamperes to thousands of amperes. Stacks to meet specific voltage and current requirements are available in an infinite number of combinations.

MANCE 1

UNBEATABLE PERFOR

STOCK JOBBER SIZES

D.C. Output	41 35 C.	Max. Input	Seletron
Mox.	Approx.	R.M.S.	Code
Amps.	Volts	Volts	Number
0.9	17	24	QIBISIB
1.6	18	24	DIBISIB
3.1	17	24	EIBISIB
5.2	17	24	FIBISIB
10.0	17	24	HIBISIB
16.0	18	24	HIB251B
24.0	18	24	H1B3SIB
1.2	36	48	D2BISIB
3.1	35	48	WE2BISIB
5.2	34	48	WF2B1S1B
10.0	34	48	WH2BISIB
16.0	35	48	H2B2518
24.0	35	48	H2B3SIB
0.9	105	144	WQ6BISIB
1.2	108	144	D6B151B
2.4	106	144	E6BISIB
5.2	103	144	WF6BISIB
0.9	122	168	WQ78ISIB
1.2	126	168	D7BISIB
2.4	123	158	E7BISIB
5.2	120	168	WF7BISIB

According to our Audit Department, replacement under warranty is anly 0.2%.



MINIATURE SELETRON RECTIFIERS

SPECIFY SELETRON MINIATURE SELENIUM RECTIFIERS FOR RADIO AND TELEVISION APPLICATIONS

Code Number	5M4	5M1	5P1	5R1	5Q1	551	1M1
Current Rating	75 ma.	100 ma.	150 ma.	200 ma.	250 ma.	500 ma.	100 ma.
Plate Length	"	1"	1-3/16"	1-1/2"	1-1/2″	2″	1″
Plate Width	1"	1″	1-3/16"	1-1/4"	1-1/2″	2″	17
Stack Thickness	11/16"	7/8"	7/8"	7/8″	1-1/8″	1-1/8″	3/8″
A.C. Volts	130 V	130 V	130 V	130 V	130 V	130 V	25 V

Our Engineering Department will be glad to aid you in the solution of your RECTIFIER problems, without obligation. Write for booklet on SELETRON RECTIFIERS. Address Department: US2.



Selenium Rectifiers by Federal

THE REVOLUTIONARY RECTIFIER WITH UNLIMITED USES IN RADIO AND ELECTRONICS







403D2625A



404D2795A



438D3428A



403D3240A

	Output	Input ((RMS)	Inverse	Peak		Sugg'd Retail Price,		Quitmut	Input ((RMS)	T	Dest		Sugg'e Retai
FTR Number		Volts	MA	Volts	MA	Application	Each	FTR Number	Output MA-DC	Volts	MA	Inverse Volts	Peak MA	Application	Price Each
402D3452A	65	130	160	380	750	B+AC-DC	\$.85	403D2889A	100	160	325	440	1200	Vibrator	\$2.25
						(5 tube)		402D3239A*	75	160	220	440	900	Vibrator Doubler	2.55
402D3150A	75	130	220	380	900	B+3-way Radios	1.04	403D3240A*	100	160	325	440	1200	Vibrator Doubler	3.45
403D2625A	100	130	325	380	1200	B+ Radios,	1.30	404D3241A*	200	160	550	440	2000	Vibrator Doubler	5.10
						Television		4D2814AS†	1000	8				Battery Charger	.70
403D2787A	+50	130	425	380	1200	B+ Radio-	1.50	104D2943S1	2000	15				Battery Charger	2.55
						Television		402D3550	150	25	270	35	1800	Bridge Rectifier	1.40
404D2795A	200	130	550	380	2000	B+Television	1.80	403D3551	300	25	540	35	2400	Bridge Rectifier	1.70
404D3450A	250	130	625	380	2000	B+Television	2.00	404D3552	600	25	1080	35	4000	Bridge Rectifier	2.10
438D3427A	400	130	1000	380	3500	B +Television	3.50	402D3151	75	20	220	55	900	Bias Rectifier	.50
438D3428A	500	130	1250	380	3500	B+Television	3.65			50	_=~	50		A STATE AND A STAT	.30

* These rectifiers have two sections—characteristics given apply to one section only; if both sections are used half-wave, voltage input is 320 volts. † The characteristics given for this rectifier are based on its use in a half-wave rectifier circuit with a 3 cell battery load. ‡ The characteristics given for this rectifier are based on its use in a full-wave rectifier circuit with a 3 cell battery load.



QUALITY CABLES AND TRANSMISSION LINES BY AMERICA'S LARGEST MANUFACTURER OF SOLID DIELECTRIC COAXIAL CABLES

2			TV-59		K-109 TV-300		
FTR Type Number	Nominal Impedance	Nominal MMF/Ft	Attenuation DB/100 ft	Nominal Jacket OD in inches	APPLICATION	Sugg'd Retail Price, Per Fool	
K-111	300		2.4 at 50 Mc 3.4 at 100 Mc 4.6 at 200 Mc	0.480 x 0.290	Television lead-in where 300 ohm shielded cable is advantageous.		
TV-59	72	22.04 at i ke	2.6 at 50 Mc 3.9 at 100 Mc 5.8 at 200 Mc	0.230	FM and Television where 72 ohm lead-in is required.		
K-109	160	8.3 at 1 kc	2.6 at 3.85 Mc 3.7 at 11.8 Mc 4.6 at 19.5 Mc	0.275	Automobile antenna lead-in.		
TV-300	300		1.15 at 50 Me 2.00 at 100 Mc 3.01 at 200 Me	0.360 x 0.070 no jacket	FM and Television antenna lead-in.	.0295	

* Trade Mark.

Federal Rectifier Equipment

Federal Selenium Rectifiers Provide Dependable and Economical DC Power

	OUTPU	JT (DC)			Sugg'd Retail	
FTR Type	Volts	Amps	INPUT	Application	Price, Each	
FTR 3246-BS FTR 1342-AS	6 6	10 6 to 3	115 volts, 60 cycle, single phase 115 volts, 60 cycle, single phase	"A" Eliminator Battery Charge	\$74.50 16.65	