WILLIAM DUBILIER
339 GARDEN ROAD
PALM BEACH, FLORIDA 33480

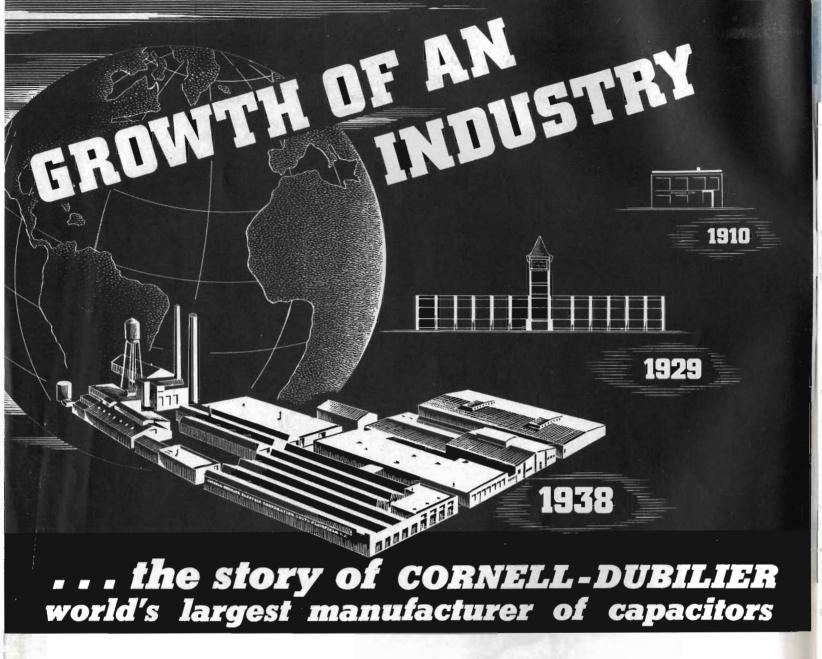


1938 - 39

### RADIO CAPACITORS

INTERNATIONALLY ACCEPTED STANDARDS SINCE 1910

CORNELL-DUBILIER ELECTRIC CORPORATION



Twenty-eight years ago was founded an organization which has devoted its efforts and energies to the perfection and production of what have been recognized as the World's Finest Capacitors. Starting with a new development—the mica transmitting capacitor—the company has steadily grown in size and importance until today, it is regarded as the leader in its field.

Dominant leadership has been made possible only for the reason that the ideals of the management have been of the highest. To make capacitors that find widespread use in the radio and electrical fields, wherein dependable operation must be obtained under severe operating conditions has been one of the problems which have been met by the Cornell-Dubilier Electric Corporation engineers. To develop new types, styles and designs of capacitors to meet the wide range of requirements of these two of the world's most important industries, the Cornell-Dubilier Electric Corporation has equipped large, modern research and experimental laboratories, well-staffed with technicians, engineers, research chemists and physicists who have brought forth many marvelous capacitors which have made possible better broadcasting, radio receivers, aircraft communication, train control, X-Ray apparatus, Power Factor correction and other important industrial equipment.

Today, in a well-organized plant covering 33 acres, employing several thousand experienced and skilled, trained workers, the Cornell-Dubilier Electric Corporation makes every kind of fixed capacitor required. The accumulated experience of twenty-eight years of intensive research and applied, concentrated knowledge is an asset of this organization which competition has not been able to meet with its low price appeal or cheaply made imitations. The C-D emblem, on every capacitor which we make, is your guarantee of a superior unit. It embodies the perfection which knowledge and skill alone can afford. You'll do well to specify and use them at all times.

## QUALITY CAPACITORS

E are proud to present our new lines of capacitors for 1938. Herein you will find illustrated and listed the finest quality capacitors that we have ever produced. Capacitors that can be used with the assurance not only that they will do the work intended for them with absolute dependability, but at the most economical prices which we have ever offered for quality merchandise. The electrical characteristics of all C-D capacitors are the best it is possible to achieve. Capacity Tolerance, Leakage, Equivalent D.C. Series Resistance, Power Factor, Voltage Breakdown, Capacity Change with Humidity and Temperature, Q, Drift, Retrace, Longevity—all have been calculated to proper levels to assure utmost constancy and satisfactory performance.

For the broadcast station, the engineer, the serviceman, the amateur, the experimenter or for the manufacturer: we offer C-D Capacitors for your every need.

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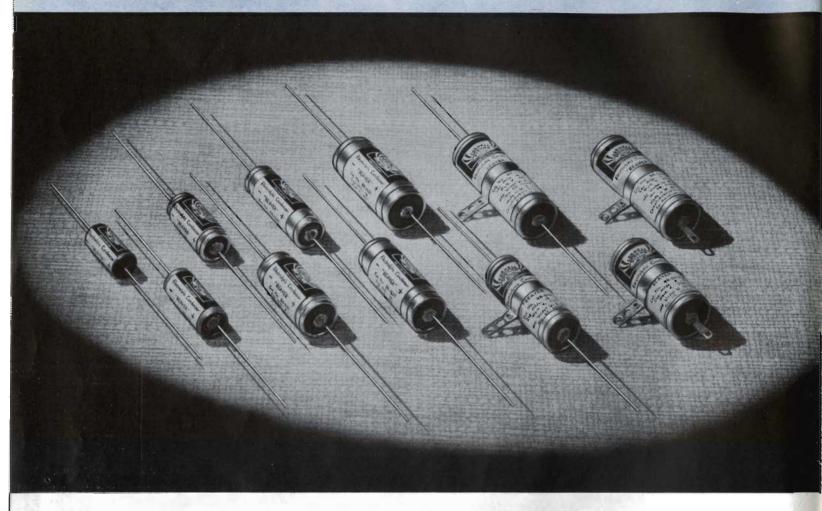
Engineers requiring information and data on broadcast station capacitors, industrial types and special applications may obtain a copy of our General Industrial and Transmitting Capacitor Catalog No. 160, on written request.

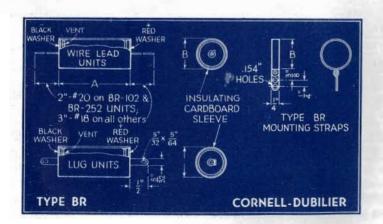
### CORNELL-DUBILIER ELECTRIC CORPORATION

1000 Hamilton Boulevard

South Plainfield, N. J., U. S. A.

Cable Address : CORDU





A NEW C-D DEVELOPMENT destined to outsell all previous types of dry electrolytics, Type BR units, so extremely small, so handy to use, and completely eliminating exact duplicate replacement capacitors, are illustrated herewith. Polarity is clearly indicated on a protective varnished cardboard sleeve fitted over a pure aluminum cartridge. A step forward in dry electrolytic capacitor design and a welcome addition for the small, midget radio receivers. Hermetically sealed, vented and very practical to employ in radio receiver circuits. Eliminate drilling of chasses, use of pal nuts, washers and minimize assembly operations as well as save space and afford quick wiring. You'll like and get good results with the NEW BLUE BEAVERS.

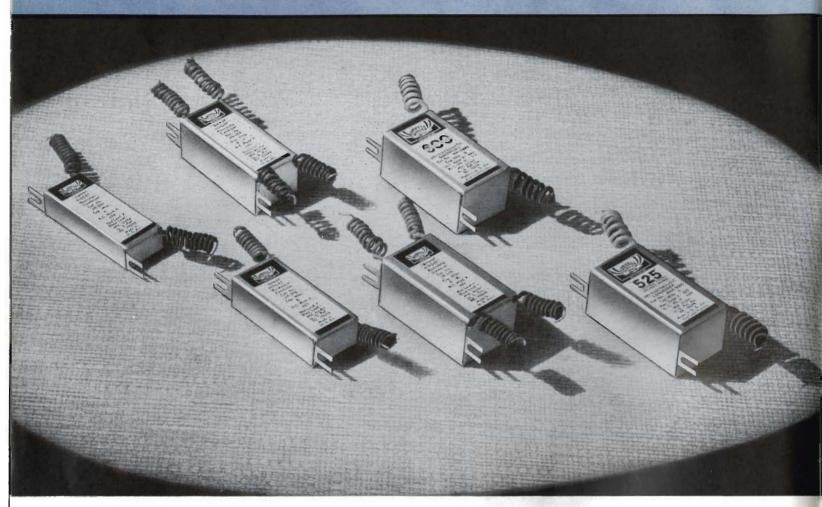
## DRY ELECTROLYTIC CAPACITORS

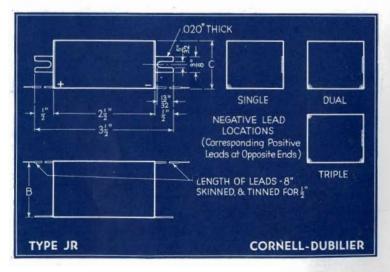
#### FEATURES OF TYPE BR

- 1—EXCLUSIVE ELECTRO-CHEMICAL ETCHING-ELIMINATES CORROSION
- 2—HI-FORMATION PROCESS—AFFORDS HIGHER VOLTAGE BREAKDOWN
- 3—HI-PRESSURE CENTRIFUGE—BETTER IMPREGNATION: LOWER POWER FACTOR
- 4—HI-PURITY ALUMINUM FOIL—BETTER DIRECT CURRENT LEAKAGE RECOVERY
- 5-SPECIAL C-D SUPER-PURITY CELLULOSE SEPARATOR-EXTRA LONG LIFE
- 6-RIGID CHEMICAL PURITY CONTROL-UNIFORM PERFORMANCE
- 7-DOUBLE AGEING-STABLE CHARACTERISTICS
- 8-ALL ALUMINUM TUBE & ACCESSORIES-UNIFORM RESULTS IN ALL WEATHER
- 9-SPECIAL VENT-SAFETY UNDER ALL OPERATING CONDITIONS
- 10-TUBULAR, COMPACT CONSTRUCTION-ALLOWS EASE OF WIRING INTO CIRCUIT

Cat. No.	Capacity Mfd.	Code Word	A Size B	Weight per 100	List Price
	-	450 V. D. 0	С,		
BR-445	4	BYVAA	$1_{16}^{9} \times \frac{5}{8}$	4½ lb.	\$.55
BR-845	8	BYVEB	$2\frac{1}{8} \times \frac{3}{4}$	7 "	.60
		350 V. D.	c.		1
BR-435	4	BYVIC	$1\frac{9}{16} \times \frac{5}{8}$	23/4 "	.50
BR-835	8	BYVOD	$1\frac{13}{16} \times \frac{3}{4}$	4 "	.55
BR-1235	12	BYVUE	$2\frac{1}{8} \times \frac{3}{4}$	51/4 "	.70
BR-1635	16	BYVYF	$2\frac{1}{8} \times \frac{7}{8}$	61/2 "	.80
		250 V. D.	C.		
BR-425	4	BYWUK	$1\frac{3}{16} \times \frac{5}{8}$	2½ "	.45
BR-825	8	$\mathbf{B}\mathbf{Y}\mathbf{W}\mathbf{Y}\mathbf{L}$	$1\frac{9}{16} \times \frac{5}{8}$	23/4 "	.50
BR-1225	12	BYXAM	$2\frac{1}{8} \times \frac{5}{8}$	4 "	.65
BR-1625	16	BYXEN	$2\frac{1}{8} \times \frac{3}{4}$	4 " 5 " 6 "	.75
BR-2025	20	BYZAS	$2\frac{1}{8} \times \frac{7}{8}$	6 "	.80
BR-4025	40	BYZET	25/8 x 7/8	9 "	.95
		150 V. D. C	C. 4-		Y Y
BR-415	4	BYZIU	$1\frac{3}{16} \times \frac{5}{8}$	13/4 "	.40
BR-815	8	BYZOV	$1\frac{3}{16} \times \frac{5}{8}$	21/4 "	.45
BR-1215	12	BYZUW	$1\frac{9}{16} \times \frac{5}{8}$	21/2 '	.50
BR-1615	16	BYZYX	1 9 x 5/8	23/4 "	.55
BR-2015	20	BYUZA	113 x 5/8	3 "	.60
BR-4015	40	ВУИУВ	25/8 x 3/4	43/4 "	.65
		25 V. D. C	the first state of the state of	, ji	
BR-102	10	BYUXC	1½ x ½	1 "	.40
BR-252	25	BYUWD	$17/2$ x $\frac{9}{48}$	13/4 "	-50

NOTES: Dimensions do not include added thickness and length of spun-over varnished cardboard tube sleeve. Added length is about  $\frac{1}{4}$ ; added diameter about  $\frac{1}{16}$ . BR units are supplied with three-inch bare wire leads. If mounting strap is desired, add 5c. to list price; if lug terminals (supplied only in large quantities to manufacturers) are desired, designate Type BR-G. Dual units are also available, standard practice being: two insulated positive leads (or lugs), with mountinggrounding strap provided. No cardboard sleeve is required for dual units. (Dimensions of BR-102 and BR-252 are over-all, as listed).





THE FAMOUS C-D HANDI-MIKES are shown here. These excellent units, in their silvered cartons and with their inherent fine electrical characteristics have been used quite extensively and with the complete approbation of tens of thousands of servicemen. Fitted with convenient mounting feet, equipped with color-coded wire leads, these compact units have a specially treated inner liner carton into which is potted with pure moisture-proof wax, the carefully assembled capacitor winding, thus affording fine protection and seal against temperature and humidity changes. Types RHM and HM employ plain foil; Type JR, uses exclusive C-D etched foil.

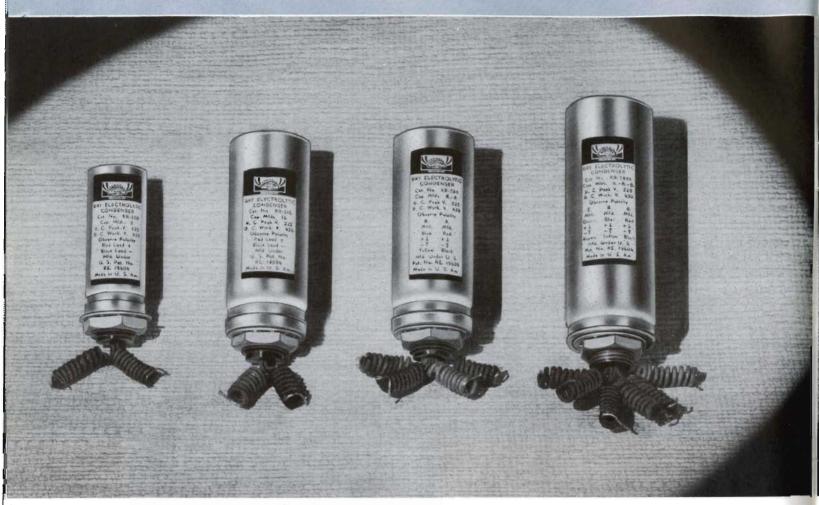
### DRY ELECTROLYTIC CAPACITORS

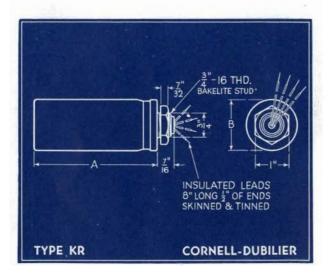
#### FEATURES OF TYPE JR

- 1-EXCLUSIVE ELECTRO-CHEMICAL ETCHING-ELIMINATES CORROSION
- 2-HI-FORMATION PROCESS-AFFORDS HIGHER VOLTAGE BREAKDOWN
- 3-HI-PRESSURE CENTRIFUGE-BETTER IMPREGNATION; LOWER POWER FACTOR
- 4-HI-PURITY ALUMINUM FOIL-BETTER DIRECT CURRENT LEAKAGE RECOVERY
- 5—SPECIAL C-D SUPER-PURITY CELLULOSE SEPARATOR—EXTRA LONG LIFE
- 6-RIGID CHEMICAL PURITY CONTROL-UNIFORM PERFORMANCE
- 7—DOUBLE AGEING—STABLE CHARACTERISTICS
- 8-TRIPLE POTTING-BETTER WEATHER-PROOFING
- 9—DOUBLE CARTON CONTAINERS—BETTER RESISTANCY TO HUMIDITY
- 10—OUTER CARTON WAX-DIPPED—ADDED PROTECTION

Cat. No.	Capacity Mfd.	Code Word	Size A B C	Weight per 100	List Price
		200 V. D.	. С.		
JR-204	4	JARZA	$2\frac{1}{2} \times \frac{3}{4} \times \frac{1}{2}$	3½ lb.	\$.65
JR-208	8	JARYE	$2\frac{1}{2} \times 1 \times \frac{9}{16}$	51/2 "	.80
JR-210	10	JARXI	$2\frac{1}{2} \times 1 \times \frac{9}{16}$	63∕₄ "	.90
JR-212	12	JARWO	$2\frac{1}{2} \times 1\frac{1}{8} \times \frac{11}{16}$	71/2 "	.95
JR-216	16	JARVU	$2\frac{1}{2} \times 1\frac{1}{8} \times \frac{11}{6}$	8½ "	1.05
JR-244	4-4	JARTZ	$2\frac{1}{2}$ x1 $\frac{1}{8}$ x $\frac{11}{16}$	81/4 "	.90
JR-288	8-8	JARRX	$2\frac{1}{2} \times 1\frac{1}{8} \times 1$	103/4 "	1.25
JR-2816	8-16	JARQH	$2\frac{1}{2}$ x1 $\frac{1}{4}$ x1 $\frac{1}{8}$	12 "	1.45
JR-2888	8-8-8	JARMN	$2\frac{1}{2}$ x13/8 x11/8	13 "	1.90
		450 V. D.	C.	4	
JR-502	2	JERAZ	$2\frac{1}{2} \times \frac{3}{4} \times \frac{1}{2}$	53/4 "	.65
JR-504	4	JEREY	$2\frac{1}{2} \times 1 \times \frac{9}{16}$	7½ "	.75
JR-508	8	JERIX	$2\frac{1}{2} \times 1\frac{1}{8} \times \frac{1}{6}$	10 "	.95
JR-512	12	JERUV	2½ x1½ x1	121/4 "	1.30
JR-516	16	JERYH	21/2 x13/8 x11/8	153/4 "	1.45
JR-544	4-4	JERBY	$2\frac{1}{2} \times 1\frac{1}{8} \times \frac{7}{8}$	121/4 "	1.20
JR-588	8-8	JERGM	2½ x13/8 x11/8	173/4 "	1.50
JR-5816	8-16	JERHK	$2\frac{1}{2}$ x2 x1 $\frac{1}{2}$	241/2 "	1.90
JR-5888	8-8-8	JERKE	$2\frac{1}{2} \times 2 \times 1\frac{1}{2}$	25 "	2.20
		TYPE RH 450 V. D.			
RHM-9040	4	ROBOX	2½ x1½ x 3/4	103/4 "	.75
RHM-9080	8	ROBOY	$2\frac{1}{2} \times 1\frac{3}{8} \times 1\frac{1}{8}$	153/4 "	.95
1		TYPE H. 475 V. D.			
HM-11080	8	TILLY	2½ x13/8 x11/8	153/4 "	1.35

NOTES: Types RHM and HM are made of highest purity plain foil and hence are slightly larger in size than Type JR. All wire leads are 8" long, plainly color-coded and firmly anchored to flap of inner carton, thus relieving strain on the connecting tab and avoiding open-circuit and corrosion at the terminal connection. The dual and triple units have separate sections, the corresponding positive and negative leads being opposite each other. These units are excellent for use in restricted space in crowded chasses. Also will eliminate the need of exact duplicate replacements to a large extent.





EXTREMELY COMPACT TYPE KR etched foil dry electrolytic capacitors have superior electrical characteristics and long life. Constructed to withstand severe mechanical stress, these screw-mounted aluminum can units are available in single, dual and triple sections, all leads being clearly color-coded. Approximately similar in size to the metal radio tubes, Type KR is made in two popular voltage ratings: 250 V.D.C. for use in A.C-D.C. or voltage-doubler midgets and 450 V.D.C. to serve a purposeful function in A.C. operated sets.

## DRY ELECTROLYTIC CAPACITORS

#### FEATURES OF TYPE KR

1-EXCLUSIVE ELECTRO-CHEMICAL ETCHING- ELIMINATES CORROSION

2—HI-FORMATION PROCESS— AFFORDS HIGHER VOLTAGE BREAKDOWN

3-HI-PRESSURE CENTRIFUGE- BETTER IMPREGNATION; LOWER POWER FACTOR

4-HI-PURITY ALUMINUM FOIL- BETTER DIRECT CURRENT LEAKAGE RECOVERY

5—SPECIAL C-D SUPER-PURITY CELLULOSE SEPARATOR— EXTRA LONG LIFE

6-RIGID CHEMICAL PURITY CONTROL- UNIFORM PERFORMANCE

7-DOUBLE AGEING- STABLE CHARACTERISTICS

8-ALL ALUMINUM CAN & ACCESSORIES- UNIFORM RESULTS IN ALL HUMIDITIES

9-ANCHORED LEADS- ELIMINATES OPEN AND SHORT-CIRCUITS

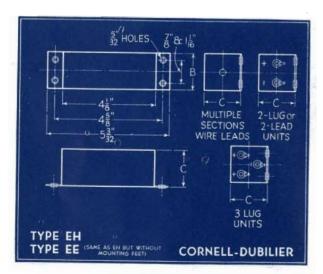
10-UNIVERSAL MOUNTING- UNIT MOUNTS IN ANY POSITION ON OR UNDER SUB-PANEL

Cat. No.	Capacity Mfd.	Code Word	Size A B	Weight Per 100	List Pric
		250 V. D. O	<b>.</b>		
KR-204	4	KYRIE	$2\frac{9}{16} \times 1$	133/4 lb.	\$.75
KR-208	8	KYROW	$2\frac{9}{16} \times 1$	14½ "	.95
KR-216	16	KAYAY	$3\frac{7}{16} \times 1$	171/4 "	1.35
KR-288	8-8	KYRET	$2\frac{11}{16} \times 13/8$	23½ "	1.45
		450 V. D. C			
KR-504	4	KEERA	$2\frac{11}{16} \times 1$	15 "	.85
KR-508	8	KEARI	$2\frac{3}{4} \times 1$	15½ "	1.05
KR-512	12	KEORE	$3\frac{7}{16} \times 1$	18 "	1.40
KR-516	16	KAZAZ	$3\frac{7}{16} \times 1\frac{3}{8}$	27½ "	1.55
KR-548	4-8	KEIRU	$3\frac{7}{16} \times 1\frac{3}{8}$	24½ "	1.45
KR-588	8-8	KEURO	$3\frac{7}{16} \times 1\frac{3}{8}$	26 "	1.60
KR-5816	8-16	KEYRY	$4\frac{7}{16} \times 1\frac{3}{8}$	311/4 "	2.25
KR-5888	8-8-8	KEORL	$4\frac{3}{8} \times 1\frac{1}{2}$	413/4 "	2.30

#### NOTES:

The substantial reduction in size of these capacitors allows their use in compact and portable amplifiers and receivers. Equipped with palnut. Comparison of the internal construction of these units with competitive makes will disclose the many reasons for the superiority of C-D. Fully wax-potted sections, carefully and completely insulated from one another as well as from the metal container; well-built by skilled operators as is readily apparent upon close inspection—these are the reasons for our claim to highest quality!





C-D "HI-MIKES" ARE STANDBY UNITS for every radio set's filter circuit! Real "heavy-duty" capacitors that have won widespread acclaim and use because of their sturdy construction and excellent performance. Extensively used wherever an extra-dependable filter capacitor is needed. Wax-dipped card-board cased units that have no equal in electrical characteristics or mechanical assembly, Type EH have mounting flanges (which may be easily cut off if necessary while Type EE employs a simple little mounting strap.) Service men who have jobs that will accommodate a larger capacitor insist on Type EH units which "stay put."

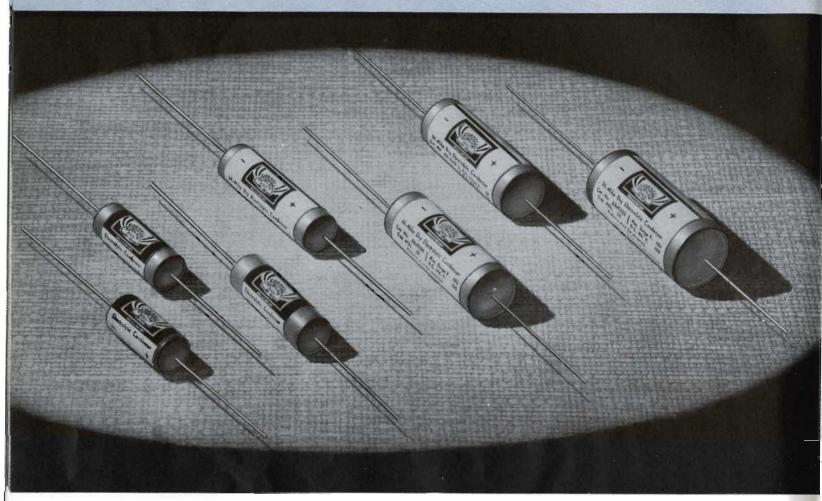
### DRY ELECTROLYTIC CAPACITORS

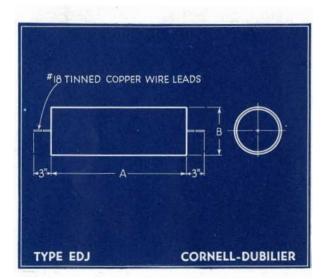
#### FEATURES OF TYPE EH

- 1—HI-FORMATION PROCESS—AFFORDS HIGHER VOLTAGE BREAKDOWN
- 2-HI-PRESSURE CENTRIFUGE-BETTER IMPREGNATION; LOWER POWER FACTOR
- 3-HI-PURITY ALUMINUM FOIL-BETTER DIRECT CURRENT LEAKAGE RECOVERY
- 4-SPECIAL C-D SUPER-PURITY CELLULOSE SEPARATOR-EXTRA LONG LIFE
- 5-RIGID CHEMICAL PURITY CONTROL-UNIFORM PERFORMANCE
- 6—DOUBLE AGEING—STABLE CHARACTERISTICS
- 7—COMPLETE WAX POTTING—BETTER WEATHER-PROOFING
- 8-WAXED OUTER CONTAINER-ADDED PROTECTION
- 9-LEAD OR LUG TERMINALS-CONVENIENT CHOICE AT NO EXTRA COST
- 10-MOUNTING FLANGE PROVIDED-SIMPLE AND EASY TO INSTALL

Cat. No.	Capacity Mfd.	Code Word	Si A B	ze C	Weight Per 100	List Price
		450 V. I	D. C.			
EH-9400	4	BLINK	4½ x 13/	8 x 3/4	123/ <sub>4</sub> lb.	\$.75
EH-9400L	4	BLOME	4½ x 13/8	$8 \times \frac{3}{4}$	123/4 "	.75
EH-9800	8	BLISS	4½ x 13/	8 x1	221/2 "	.95
EH-9800L	8	BLOPP	4½ x 13/	8 x1	221/2 "	.95
EH-9160	16	BLUQU	$4\frac{1}{8} \times 1\frac{9}{16}$	x1 5	38 "	1.45
EH-9404	4-4	ANGLE	$4\frac{1}{8} \times 1\frac{9}{16}$	$_{5}$ x $1\frac{3}{16}$	28 "	1.20
EH-9404SL	4-4	ZOWIE	$4\frac{1}{8} \times 1\frac{9}{16}$	$_{6}$ x $1\frac{3}{16}$	31 "	1.20
EH-9408	4-8	ANGOR	$4\frac{1}{8} \times 1\frac{9}{16}$	$x1\frac{3}{16}$	30 "	1.35
EH-9408SL	4-8	ZIPZA	$4\frac{1}{8} \times 1\frac{9}{16}$	$3 \times 1\frac{3}{16}$	33 "	1.35
EH-9808	8-8	ANJOU	$4\frac{1}{8} \times 1\frac{9}{16}$	5 x1½	38 "	1.50
EH-9808SL	8-8	ZANJE	4½ x 1½	x1½	40 "	1.50
EH-9444L	4-4-4	BLAND	$4\frac{1}{8} \times 1\frac{9}{16}$	$x1\frac{3}{16}$	33 "	1.80
EH-9888L	8-8-8	BLAST	$4\frac{1}{8} \times 2$	x2	56 "	2.20
Š.		TYPE	EE	01		3
		450 V. D	). C.			
EE-9080	8	ALPIA	4½ x 13/8	x 15	22 "	.95
EE-9080L	8	ALPOT	4½ x 13/8	x 15/16	22 "	.95

NOTES. (Type EE has all above features excepting mounting flange). The Type EH dual units are available in separate section construction, having four color-coded wire leads; also in common negative three lug-terminal assembly, with two positive and one negative terminals. The triple section units have four leads, three of which are positive and the fourth, common negative. No deviations are made from the above practice for reason that most circuit combinations can be successfully met by the use of one or more of the capacitors listed. Remember—C-D stands for "Consistent Dependability"! (L denotes wire leads; SL—separate leads).





ANOTHER NEW C-D DEVELOPMENT, TYPE EDJ tubular etched foil dry electrolytics are fast finding favor with both manufacturers and servicemen alike for reason of their handy size, ease of wiring into circuit and fine characteristics. These units are slightly longer than Type BR because the ends of the tubes are generously potted with high melting-point wax helping to firmly embed the wire leads and keep the capacitor impervious to moisture. The polarity of the leads is clearly defined by a large "plus" and "minus" sign at the respective ends of the tube.

## DRY ELECTROLYTIC CAPACITORS

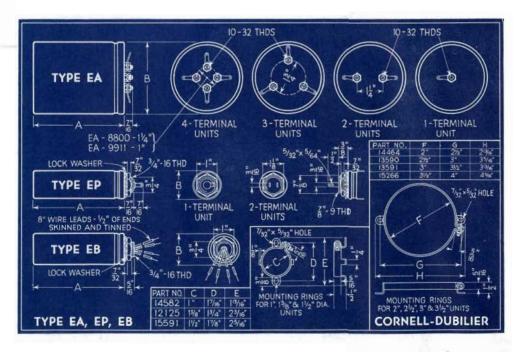
#### FEATURES OF TYPE EDJ

- 1-EXCLUSIVE ELECTRO-CHEMICAL ETCHING-ELIMINATES CORROSION
- 2-HI-FORMATION PROCESS-AFFORDS HIGHER VOLTAGE BREAKDOWN
- 3-HI-PRESSURE CENTRIFUGE-BETTER IMPREGNATION; LOWER POWER FACTOR
- 4-HI-PURITY ALUMINUM FOIL-BETTER DIRECT CURRENT LEAKAGE RECOVERY
- 5—SPECIAL C-D SUPER-PURITY CELLULOSE SEPARATOR—EXTRA LONG LIFE
- 6-RIGID CHEMICAL PURITY CONTROL-UNIFORM PERFORMANCE
- 7-DOUBLE AGEING-STABLE CHARACTERISTICS
- 8—SPECIALLY-TREATED CARDBOARD TUBE—PROTECTION AGAINST HUMIDITY
- 9-SPECIAL-WAX POURED ENDS-ADDED MECHANICAL STRENGTH FOR LEADS
- 10-TUBULAR, COMPACT CONSTRUCTION ALLOWS EASE OF WIRING INTO CIRCUIT

Cat. No.	Capacity Mfd.	Code Word	Size A B	Weight Per 100	List Pric
		450 V. D.	C.		
EDJ-9010	1	EDJAB	$1\frac{1}{2} \times \frac{5}{8}$	$2\frac{1}{2}$ 1b.	\$.55
EDJ-9020	2	EDJEC	$17/8 \times 116$	31/4 "	.65
EDJ-9040	4	EDJID	$2\frac{1}{8} \times \frac{3}{4}$	41/4 "	.75
EDJ-9080	8	EDJOE	21/2 x 7/8	71/2 "	.95
3		200 V. D.	C.		
EDJ-7080	8	EDJUF	$17/8 \times 5/8$	3 "	.80
		100 V. D.	C.		
EDJ-5050	5	EDAJA	$1\frac{1}{2} \times \frac{9}{16}$	2 "	.55
EDJ-5100	10	EDEJE	$1\frac{7}{8} \times \frac{9}{16}$	21/2 "	.70
EDJ-5250	25	EDIJI	21/8 x 5/8	3´ "	.95
	a 17.83	50 V. D.	C.		
ED]-3050	5	EDOJO	1½ x ½	13/4 "	.50
EDJ-3100	10	EDUJU	$1\frac{1}{2} \times \frac{9}{16}$	2 "	.65
EDJ-3250	25	EDYJY	17/8 x 5/8	2 "	.80
EDJ-3500	50	EDBYZ	$2\frac{1}{2} \times \frac{3}{4}$	5½ " 8 "	1.20
EDJ-31000	100	EDCUY	3 x 7/8	8 "	1.95
	3" 1005	25 V. D.	C.	500	
EDJ-2100	10	EDDOX	1½ x ½	13/4 "	.50
EDJ-2200	20	EDEIW	17/8 x 196	21/2 "	.60
EDJ-2250	25	EDFEV	$1\frac{7}{8} \times \frac{19}{16}$	2½ " 3¼ "	.65
EDJ-2500	50	EDGAU	$2\frac{1}{8} \times \frac{5}{8}$	31/4 "	.95
EDJ-2055	5-5	EDHYT	17/8 x 11/6	33/4 "	.75
EDJ-2101	10-10	EDIOQ	$17/8 \times \frac{11}{16}$	4 "	.75

NOTES: Compare a C-D tubular electrolytic capacitor with any other electrolytic. See for yourself the outstanding points of superiority. Over sixty different processes are involved in what appears to be a simple unit! Most of these processes must be closely controlled in order to obtain best results. Chemical solutions must be kept to rigid specifications; forming voltages must be of certain potentials; temperatures, humidity control and every phase of making these little tubulars is most carefully watched. It will pay to keep your ABCD's in mind—Always Buy Cornell-Dubilier's!





THE C-D STAND-ARD "HI-MIKES" TYPES EB, EP and EA are depicted above and represent the finest achievement in plain foil, dry electrolytic capacitors. Type EB is equipped with insulated, color-coded wire leads; in the single section units, the red lead is positive, the black, negative. In the dual units, this combination hold for the one section, while a blue lead and its complementary yellow lead makes up the other section.

In the EP and EA units, the central insulated terminal is the positive, while the metal container is the negative. In the multiple section units, Types EP and EA, the positive terminals are insulated and the container is common negative, most generally grounded to the chassis.

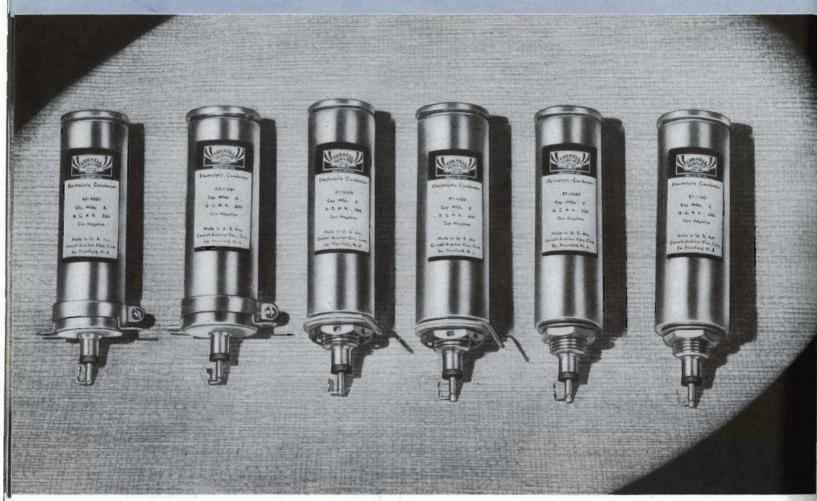
## DRY ELECTROLYTIC CAPACITORS

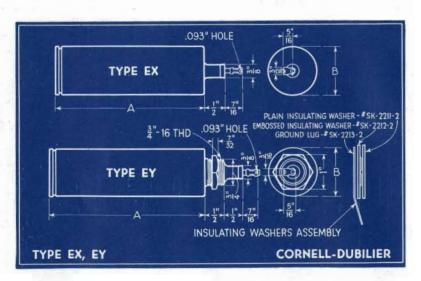
### FEATURES OF TYPES EB, EP, and EA

- 1—HI-FORMATION PROCESS—AFFORDS HIGHER VOLTAGE BREAKDOWN
- 2-HI-PRESSURE CENTRIFUGE BETTER IMPREGNATION: LOWER POWER FACTOR
- 3-HI-PURITY ALUMINUM FOIL-BETTER DIRECT CURRENT LEAKAGE RECOVERY
- 4—SPECIAL C-D SUPER-CELLULOSE SEPARATOR—EXTRA LONG LIFE
- 5-RIGID CHEMICAL PURITY CONTROL-UNIFORM PERFORMANCE
- 6—DOUBLE AGEING—STABLE CHARACTERISTICS
- 7—COMPLETE WAX POTTING—BETTER WEATHER-PROOFING
- 8-ALL ALUMINUM CAN AND ACCESSORIES-UNIFORM RESULTS IN ALL HUMIDITIES
- 9-ANCHORED LEADS-ELIMINATES OPEN AND SHORT-CIRCUITS
- 10-UNIVERSAL MOUNTING-UNITS MOUNT IN ANY POSITION ON OR UNDER SUB-PANEL

Cat. No.	Capacity Mfd.	CodeWord	Size A B	Weight Per100	List Price
		TYPE E	3		
		450 V. D.	С.		
EB-9040	4	EAGLE	$2\frac{1}{2} \times 1\frac{3}{8}$	18½ lb.	\$.85
EB-9080	8	EJECT	$43/8 \times 13/8$	32 ′ "	1.05
EB-9100	10	ELBOW	$4\frac{3}{8} \times 1\frac{3}{8}$	30 "	1.25
EB-9120	12	ELECT	$4\frac{3}{8} \times 1\frac{1}{2}$	40 "	1.40
EB-9160	16	ELECY	$4\frac{3}{8} \times 1\frac{1}{2}$	38 "	1.55
EB-9180	18	EBATA	$43/8 \times 11/2$	40 "	1.65
EB-4400	4-4	AURAL	$43/8 \times 13/8$	32½ "	1.30
EB-4800	4-8	AVAIL	$43/8 \times 11/2$	35 "	1.45
EB-8800	8-8	YANNE	$43/8 \times 11/2$	39 "	1.60
		475 V. D.	C.		
EB-11080	8	EBHIT	$43/8 \times 13/8$	36 "	1.50
		TYPE EF 450 V. D.			
EP-9080	8	ELATE	$4\frac{7}{16} \times 13/8$	28½ "	1.05
EP-9081	8	ELITE	$4\frac{7}{16} \times 1$	22 "	1.05
EP-9808	8-8	TOONU	$4\frac{7}{16} \times 13/8$	351/2 "	1.60
		TYPE EA 450 V. D.	_		
EA-9080	8	APORT	43/8 x 13/8	27 "	1.05
EA-5150	5-15	EYRIE	$43/8 \times 21/2$	88 "	2.30
EA-8800*	8-8	AUGUR	$43/8 \times 2^{1/2}$	71 "	1.80
EA-8801	8-8	AULBE	$43/8 \times 2^{1/2}$	70 "	1.80
EA-8160	8-16	BAIRN	$43/8 \times 21/2$	86 "	2.35
EA-8880	8-8-8	BAJRA	$43/8 \times 3$	92 "	2.70
EA-9918	9-9-18	FERRY	$43/8 \times 3$	110 "	3.75
E <b>A-</b> 9911	9-9-18-18	FILLY	$43/8 \times 31/2$	150 "	5.25
	(*)—Cat. No. E	CA-8800 is a dual, separa	te-section 4-terminal	capacitor.	

NOTES: Types EB and EP are supplied with lock washer and hexagon nut. Type EA is provided with a mounting ring. Of the many millions of dry electrolytic capacitors in use it is safe to say that a predominance of Types EB and EA will be found still in service! It is well to remember that an electrolytic capacitor will last a long time if it is operated at or slightly under its rating. It is also well to keep in mind that a loss of capacity results from momentarily reversing polarity, with permanent damage resulting in total breakdown after 4 or 5 minutes of this.





C-D "HI-MIKE" WET ELECTROLYTICS are mechanically and electrically perfected to a high degree. Vented, to allow generated gas to escape harmlessly, these self-healing units have remarkably long life and fine filtering efficiency. Possessing a certain amount of "self-regulation" properties, special designs are available to meet definite regulation characteristics. Types EX and EY, with high scintillation point, are the result of years of constant research and experimentation. Economical to use, they assure permanent satisfactory performance.

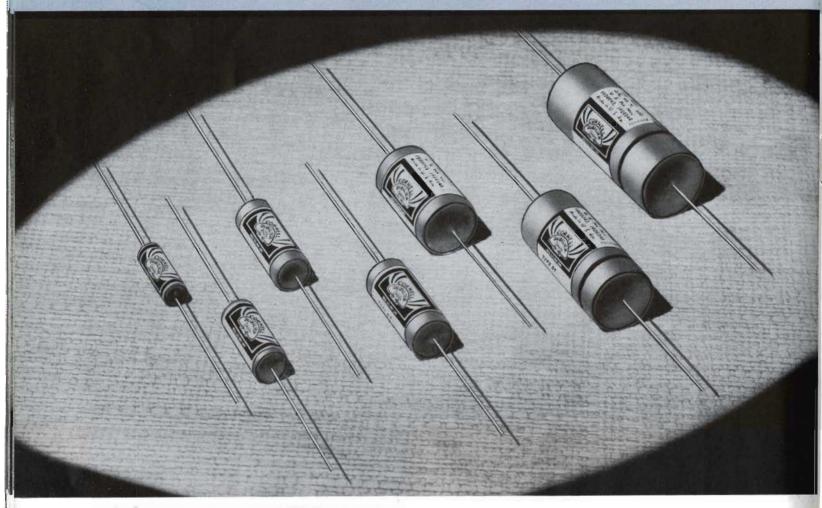
## WET ELECTROLYTIC CAPACITORS

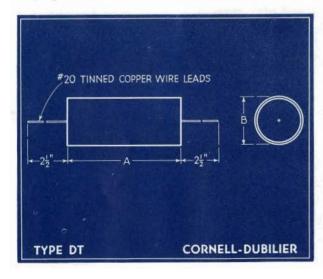
#### FEATURES OF TYPES EY and EX

- 1—EXCLUSIVE ELECTRO-CHEMICAL ETCHING—ELIMINATES CORROSION
- 2-HI-FORMATION PROCESS-AFFORDS HIGHER SCINTILLATING VOLTAGES
- 3-HI-PURITY ALUMINUM FOIL-BETTER DIRECT CURRENT LEAKAGE RECOVERY
- 4-SPECIAL CLEANING PROCESS- ASSURES LONGER LIFE AT HIGH AMBIENT HEAT
- 5-HI-PURITY ELECTROLYTE-LONGER IDLE AND ACTIVE LIFE
- 6-POSITIVE VENT CONSTRUCTION-ALWAYS WORKS; PREVENTS ACCIDENT
- 7-INVERTED & VERTICAL MOUNTING\_SIMPLE TO INSTALL; MECHANICALLY STRONG

Cat. No.	Capacity Mfd.	Code Word	A Size	Weight Per 100	List Price
		TYPE EY			
		600 Peak Vol	Its		
EY-11080	8	WUHOO	4½ x 13/8	29 lb.	\$1.40
EY-11081	8	WUHUM	$4\frac{1}{2} \times 1\frac{1}{2}$	32 "	1.50
EY-11600	16	WUHYP	$4\frac{1}{2} \times 1\frac{1}{2}$	32 "	2.00
l.		500 Peak Vol	lts	0	1
EY-9080	8	WENAN	$4\frac{1}{2} \times 1\frac{3}{8}$	29"	1.00
EY-9081	8	WERAR	$4\frac{1}{2} \times 1\frac{1}{2}$	32 "	1.00
EY-9082	8	WAKEE	$4\frac{1}{2} \times 1^{2}$	17 "	.95
EY-9083	8	WAKOO	$3\frac{1}{2} \times 1$	15 "	.95
EY-9084	8	WAKUU	$3\frac{1}{2} \times 1\frac{3}{8}$	22 "	1.00
EY-9100	10	WETAT	$4\frac{1}{2} \times 1\frac{1}{2}$	32 "	1.10
EY-9120	12	WEXAX	$4\frac{1}{2} \times 1\frac{1}{2}$	32 "	1.20
EY-9160	16	WAKII	$4\frac{1}{2} \times 1\frac{1}{2}$	32 "	1.40
EY-9180	18	WAKAA	$4\frac{1}{2} \times 1\frac{1}{2}$	32 "	1.45
EY-9200	20	WILZA	$4\frac{1}{2} \times 1\frac{1}{2}$	33 "	1.50
EY-9300	30	WILYE	$4\frac{1}{2} \times 1\frac{1}{2}$	33 "	2.00
		475 Peak Vol	lts		
EY-8400	40	WILXI	4½ x 1½	33 "	2.10
		350 Peak Vol	lts	and the sale	1 -
EY-7240	24	WILWO	4½ x 13/8	30 "	1.50
EY-7300	30	WILVY	$4\frac{1}{2} \times 1\frac{1}{2}$	33 "	1.75
EY-7350	35	WILUH	$4\frac{1}{2} \times 1\frac{1}{2}$	33 "	2.00
		300 Peak Vol	lts		10
EY-6160	16	WOMUT	3½ x 1	14 "	1.15
		200 Peak Vo	lts		9. Jan. A
EY-5200	20	WONTU	3½ x 1	15 "	1.20
	40	WOOPE	$3\frac{7}{2} \times 1\frac{3}{8}$	22 "	1.80
EY-5400	40	1 700 2 200		LL	1.00
		TYPE EX			
		600 Peak Vol	lts		
EX-11080	8	WUHBO	$4\frac{1}{2} \times 13\frac{8}{8}$	27 "	1.40
		500 Peak Vol	İts	-	
EX-9080	8	WADAD	$4\frac{1}{2} \times 1\frac{3}{8}$	27 "	1.00
		and one large connecti	1		

NOTES: TYPE EY is provided with a palnut; Type EX is equipped with a mounting ring. Insulating washers and large ground lug are optional, at slight extra cost, and are used to insulate the metal container, which is the negative terminal, from the chassis when required.





Radio receivers employ from 5 to 15 or more paper tubular capacitors, the most usual function being to bypass radio frequency currents. If these units are improperly constructed—as are so many "cheap" makes to be found on the market,—endless trouble ensues. The manufacturer and serviceman who skimps on these important little tubulars for reason of price or quantity is making a grave mistake. Type DT is a real quality capacitor at the lowest price ever made available. Use them every time for all your requirements.

C-D FAMOUS "DWARF-TIGER" TUBULARS need no superlatives to describe their inherent fine qualities and super-fine characteristics. These non-inductively wound, specially sealed and impregnated paper tubular capacitors are small, have a high safety factor, are uniform in electrical properties and have well-soldered rigidly anchored wire leads. A specially-treated cardboard tube keeps out moisture. High melting point wax ends add strength and give extra protection to the unit. C-D has produced many hundreds of millions of these tubulars, more than any other Company in the world! Use them for their Consistently Dependable service!

### PAPER TUBULAR CAPACITORS

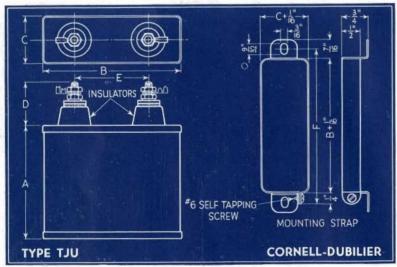
#### FEATURES OF TYPE DT

- 1-HALOWAX IMPREGNATED DECREASED PHYSICAL, SIZE
- 2—HI-PURITY ALUMINUM FOIL—LOWER R.F. RESISTANCE; LIGHT WEIGHT
  3—HI-PURITY MULTI-LAMINATED KRAFT TISSUE—HIGHER VOLTAGE BREAKDOWN;
  MINIMUM LEAKAGE
- -VACUUM DRIED & IMPREGNATED LOWER EQUIVALENT SERIES RESISTANCE; LONGER LIFE
- -OIL-COOLED-HIGHER VOLTAGE BREAKDOWN
- 6-RIGIDLY TESTED-UNIFORM PRODUCT
- 7—SELF-SUPPORTING LEADS—NO CONTACT RESISTANCE; ADDED STRENGTH
  8—SPECIAL WAX-IMPREGNATED TUBE—ADDED PROTECTION AGAINST MOISTURE
  9—SMALL SIZE, NON-INDUCTIVE—"SHORT-PATH" R.F. BYPASS
  10—SPECIAL WAX-POTTED ENDS—BETTER HUMIDITY AND TEMPERATURE SEAL

- 11-CONSERVATIVE D.C. RATING TRIPLE-TESTING ASSURES DEPENDABLE SERVICE

Cat. No.	Capacity Mfd.	Code Word	A B	Weight Per 100	List Price
		400 V. D. C.			
DT-4S1	.01	GUSTE	$1\frac{1}{4} \times \frac{3}{8}$	1½ lb.	\$.15
DT-4S15	.015	GRUSO	$1\frac{1}{4} \times \frac{3}{8}$	1½ " 1½ "	.15
DT-4S2	.02	BROIL	13/8 x 3/8	11/2 "	.15
DT-4S25	.025	BRUAP	13/8 x 7/6	11/2 "	.15
DT-4S3	.03	BRONX	13/ - 7	13/4 "	.15
			13/8 x 7/6		
DT-4S4	.04	BRIMZ	$15/8 \times \frac{7}{16}$	19/4	.15
DT-4S5	.05	BROKE	$15/8 \times \frac{7}{16}$	Z	.15
DT-4S6	.06	BRIPA	$15/8 \times 10^{7}$	4	.20
DT-4P1	.1	BROOK	$15/8 \times \frac{3}{16}$	21/4 "	.20
DT-4P2	.2	BRUUT	$2 \times \frac{1}{16}$	41/2 "	.25
DT-4P25	.25	BROTH	$2 \times \frac{3}{4}$	41/2 "	.25
DT-4P5	.5	BROWN	$2\frac{1}{8} \times \frac{7}{8}$	71/4 "	.35
DT-4W1	1	AFORE	25/8 x 1	113/4 "	.50
*> m - m -	2224	600 V. D. C.	4.0	1 "	
DT-6T1	.0001	GYPSY .	$1\frac{3}{16} \times \frac{3}{8}$	1	.15
DT-6T25	.00025	GYRAL	$1\frac{3}{16} \times \frac{3}{8}$	1 "	.15
DT-6T5	.0005	GYRUS	1 1 8 x 3/8	1 "	.15
DT-6D1	.001	BUGLE	$1\frac{1}{4} \times \frac{3}{8}$	1 "	.15
DT-6D2	.002	BUILD	11/4 × 3/8	1 "	.15
DT-6D3	.003	BUILT	11/4 x 3/8	1 "	.15
DT-6D4	.004	BULGE	11/4 x 3/8	1 "	.15
DT-6D5	.005	BULLY	11/4 x 3/8	î "	.15
DT-6D6	.005	BUNCH		î "	
			11/4 x 3/8		.15
DT-6S1	.01	BRUIN	$13/8 \times 18$	1/2	.15
DT-6S15	.015	BRUOX	15/8 x 3/8	1/2	.15
DT-6S2	.02	BRUIT	$15/8 \times \frac{7}{16}$	19/4	.15
DT-6S25	.025	BRUYK	15/8 x 1/2	2 "	.20
DT-6\$3	.03	BRUMP	$15/8 \times 1/2$	21/4 "	.20
DT-6S4	.04	BRUZZ	$15/8 \times 5/8$	21/2 "	.20
DT-6S5	.05	BRUNT	15/8 x 5/8	21/2 "	.20
DT-6S6	.06	BRUKS	15/8 x 5/8	21/2 "	.25
DT-6P1	.1	BRUTE	$17/8 \times \frac{11}{16}$	41/4 "	.25
DT-6P2	.2	BRULL	21/8 x 13	41/4 "	.35
DT-6P25	.25	BUDGE		8 "	
		BUDIT	21/8 x 15		.35
DT-6P3 DT-6P5	.3 .5	BUGGY	2½ x 1 25/8 x 1	9½ " 9½ "	.45 .50
		1000 V. D. C.	4 - 0		
DT-10D1	.001	DATAA	11/4 x 3/8	1 "	.20
DT-10D2	.002	DATEE	11/4 x 3/8	1 "	.20
DT-10D3	.003	DATII	11/4 x 3/8	11/4 "	.20
DT-10D3	.004	DATOO	11/4 x 3/8	11/4 "	.20
DT-10D4	.005	DATUU	11/4 x 1/6	11/4 "	.20
DT-10D6	.006	DATYP	$1\frac{1}{4} \times \frac{7}{16}$	174	.20
DT-10D7	.007	DETBA	$1\frac{1}{4} \times \frac{7}{16}$	1/4	.20
DT-10D8	.008	DETCE	$1\frac{1}{4} \times \frac{7}{16}$	11/4 "	.20
DT-10S1	.01	DETDI	$1\frac{1}{4} \times \frac{1}{2}$	11/2 "	.30
DT-10S15	.015	DETEO	$1\frac{5}{8} \times \frac{1}{2}$	11/2 "	.30
DT-10S2	.02	DETFU	15/8 x 1/2	13/4 "	.30
DT-10S3	.03	DETGY	$15/8 \times 16^{\circ}$	21/4 "	.35
DT-10S4	.04	DITHA	$\frac{1}{2}$ x $\frac{1}{16}$	23/4 "	
DT-10S4	.05	DITIB			.35
			- 19	3	.35
DT-10S6	.06	DITAC	2 x 5/8	31/4 "	.35
DT-10S75	.075	DITED	2 $x \frac{11}{16}$	774	.40
DT-10P1	.1	DITOE	2 x 3/4	8 "	.40
MOTE. See De	ge 37—for tubular units	rated at 1600 V.D.C. (2000 V	7. Peak) suitable	for automobile ra	dia





C-D DYKANOL TRANS-MITTING FILTER CA-PACITORS TYPE TJU are without doubt the most dependable units offered to the radio trade - amateur, broadcast and commercial. Beautifully designed, compact, light-weight, safelyrated, furnished with universal mounting clamp, well - insulated terminals, fire-proof and attractively priced. Type TJU units are the culmination of the experience of 28 years of building capacitors exclusively. Fully guaranteed dependable for operation under any climatic conditions.

These are the capacitors which practically every broadcast and government station in the world uses with such marked success. STANDARD EQUIPMENT WITH TENS OF THOUSANDS OF AMATEURS WHO WILL BUY NOTHING ELSE BUT C-D DYKANOL UNITS!

Note the new low prices making it possible for the first time to obtain in a C-D Dykanol unit a combination of the most highly engineered transmitting filter capacitor at the lowest prices. (Note: Dykanol is a stable chemical compound and will not give off free chlorine regardless of voltage stress or temperature). For higher voltage units (6000 to 25,000 V.D.C.), see Catalog No. 160, which is available to accredited engineering, educational, broadcasting and manufacturing institutions on written request.



WILLIAM DUBILIER 339 GARDEN ROAD PALM BEACH, FLORIDA 33480

1939

CATALOG No. 162 A

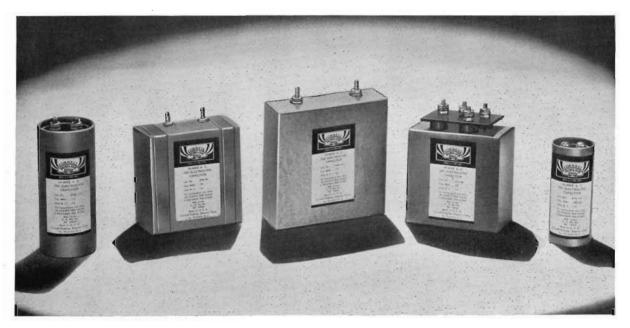
## **ELECTROLYTIC CAPACITORS** For Motor Starting

CORNELL-DUBILIER ELECTRIC CORP.

South Plainfield, N. J., U. S. A. Cable Address: CORDU

### CORNELL-DUBILIER Exact Duplicate CAPACITORS

For use with Motor Driven Equipment such as in Refrigerators, etc. Electrolytic Capacitors, Rated for operation on 110 v. (to 250 v.) 60 cycle A.C. For intermittent use only—20, 3-second starts per hour.



Mirgon	CLB	JPW	LMW		JDS		ETN
Harry Alters	Mf'g. Part No.	Manufacturer	Catalog	Cap. MFD		L.W.H. or D.H.	
Harry Alters	88021 42480		CLB 115-7	115	110	31/2 x 31/2 x 2 2 x 41/8	4.65
Baldor Elec. Co.   LMW 150-1   150   110   4½ × 4½ × 1½   4.85	4749	Harry Alters	CLB 100-1	100	110	21/2 x 41/8 13/8 x 23/4	4.25
March   Marc		Baldor Elec. Co.	LMW 150-1 LMW 115	115	110	4½ x 4½ x 1½ 4½ x 4½ x 1½	4.65
March   Marc			ETN 130	124-138 75-84	110 110	13/8 x 31/4 13/8 x 31/4 13/8 x 31/4	3.85 2.75
Black & Decker   CLB 75   75   110   2½ x 4½ s 3.80		., ., .,	LMO 20	20-24	220 220		3.80
Black & Decker   CLB 75   75   110   2½ x 4½ s 3.80			LMO 30 LMO 50	32-36 53-60	220 220	41/4 x 41/4 x 11/2 41/4 x 41/4 x 11/2 41/4 x 41/4 x 11/2	4.85 8.60
Bodine	04270	Black & Decker	CLB 75 CLB 150-1	75 150	110 110	21/2 x 41/8 21/2 x 41/8	3.60 5.50
Brown & Brockmeyer		Bodine	CLB 70 .	70	110	2 x 41/8	3,50
Century Elec							
110060		Canatsay Elec.		161-180		13/8 x 41/8	
110060		***************************************	LMW 115	115	110	41/2 x 41/2 x 11/4 41/2 x 41/2 x 11/4	3.75 4.65
110060	C-12018					$4\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{1}{2}$	5.50
110060			CLB 115-7	115	110	2 x 41/8	4.65
110060		**	CLB 50-3			2 x 41/8 2 x 41/9	3.00
12018-2						13/o x 31/4	2.50
110070		11 11				21/2 x 41/8	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						$13/8 \times 31/4$	2.75
110115		**					
110150						$13/8 \times 31/4$	3.85
C10/06		** **				13/8 X 41/8 13/8 X 41/8	
C10/06			ETN 225-3	216-240		$2 \times 4^{1/8}$	5.50
C10/06	110350					2 x 4 <sup>1</sup> / <sub>8</sub> 2 x 4 <sup>1</sup> / <sub>9</sub>	
1062880		,,,,,	CLB 40-1	A second		13/8 x 41/8	2.75
1062880						21/2 x 41/8	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1062880	11 11 11	CLO 30	29	220	$2^{1/2} \times 4^{1/6}$	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						$2^{1/2} \times 4^{1/8}$	
1063866						21/2 X 41/8 21/2 X 41/9	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			JDS 115	115	110	$31/2 \times 31/2 \times 2$	4.65
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$				115	220	$3\frac{1}{2} \times 3\frac{1}{2} \times 2$ $3\frac{1}{2} \times 3\frac{1}{2} \times 2$	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1063991		JDO 30	29	220	$31/2 \times 31/2 \times 2$	4.85
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				100		31/2 x 31/2 x 2	
1066308   " " "   JDS 100   100   110   3½ x 3½ x 2   4.25   1066307   " " "   JDS 115   115   110   3½ x 3½ x 2   4.65   1062383   " " "   CLB 115-2   115   110   2½ x 4½   4.65	1066301	11 11 11	JDS 90	90	110	$3\frac{1}{2} \times 3\frac{1}{2} \times 2$	4.00
1062383						$3\frac{1}{2} \times 3\frac{1}{2} \times 2$	

CORNELL DUBILIER Exact Duplicate CAPACITORS

	CORNELL-DUBII	C. D.	1		Dimensions	Lis
Mf'g. Part No.	Manufacturer	Catalog No.	Cap. MFD	A.C. Voltage	L.W.H. or D.H.	Prio
	Elec. Prod Elec. Specialty	IMW 115 JDP 80	115	110	4½ x 4½ x 1½ 3½ x 3½ x 2	5.0
	Elec. Specialty	ETN 45CB	43-48 64-72	110 110	31/2 x 31/2 x 2 13/8 x 21/2 13/8 x 31/4 11/2 x 41/4 11/2 x 41/4 2 x 41/4	2.
	***	ETN 70-1CB ETO 35CB	32-36	220	11/2 x 41/4	5.
	11 11	ETO 45-1CB ETO 80CB	43-48 75-84	220 220	11/2 x 41/4 11/2 x 41/4 2 x 41/4	9.
20PE100	Emerson Elec.	LOW 100	100	110	41/2 x 41/2 x 11/4	4.
20PE100 25PE100 34PE11	" "	CLB 100-1 CTM 115	100 115	110 110	21/5 × 41/6 2 × 47/8 2 × 47/8 2 × 47/8 2 × 47/8 2 × 47/8 2 × 47/8	4. 4. 6. 2.
12PE	***	ETN 285-2 CLB 20-1 CLB 30-1	260-300 20	110 110	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2.
12E02X 12E03X		CLB 20-1 CLB 30-1	30	110	2 x 4 <sup>7</sup> / <sub>8</sub>	2. 4.
12P10X 12P115	" "	CLB 100-2 CLB 115-10	100 115	110 110	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
3P35X	" "	CLB 350 CLB 225	350 225	110 110	$3\frac{1}{2} \times 4\frac{7}{8}$ $3\frac{1}{2} \times 4\frac{7}{8}$	11. 7. 10. 2. 4. 3.
13P25X 13P300	11 11	CLB 300	300	110	$31/2 \times 47/8$	10.
5P040 1P10X	:: ::	CLB 40-2 CLB 100	40 100	110	1½ x 3¼ 2 x 4⅓ 2 x 4⅓ 2 x 4⅓	4.
1P80	11 11	CLB 80 ETN 130-1	80 124-138	110 110	2 x 4 <sup>1</sup> / <sub>8</sub> 1 <sup>1</sup> / <sub>2</sub> x 3 <sup>1</sup> / <sub>4</sub>	
52PE11E 54P10X		CTM 100	100	110	1 <sup>1</sup> / <sub>2</sub> x 3 <sup>1</sup> / <sub>4</sub> 2 x 4 <sup>7</sup> / <sub>8</sub> 2 x 4 <sup>1</sup> / <sub>8</sub>	4. 7. 4.
SPBTU SOPE13E		ETN 340 ETN 155-2	315-360 145-162	110 110	13/, * 35/	4.
0PE065 1P065	33 33	ETN 75-1 CLB 65-1	70-78 65	110 110	13/4 x 35/8 13/4 x 35/8 2 x 2 21/32 21/2 x 43/4	2.
6PMGM	11	CLB 200-1	200	110	21/2 x 43/4	7.
128291	Frigidaire General Motors	ETN 110	107-129	110	13/8 x 31/4	3.
	General Electric	CLB 60 ETN 75	70-78	110	2 × 4 <sup>1</sup> / <sub>8</sub> 13/ <sub>8</sub> × 3 <sup>1</sup> / <sub>4</sub> 13/ <sub>8</sub> × 3 <sup>1</sup> / <sub>4</sub> 2 × 4 <sup>1</sup> / <sub>8</sub>	2. 2. 3. 3. 3.
C5081178AA-4	" "	ETN 80 CLB 70	75-84 70	110 110	2 x 41/8	3.
K5081178AA-5	" "	ETN 90	86-96 86-96	110 110	3/0 X 31/4	3.
		CLB 80-1 CLB 100-1	100	110	$2^{1}/_{2} \times 4^{1}/_{8}$	4.
K5081178AA-3	: ::	CLB 100 ETN 115	100 108-120	110 110	13/8 x 31/4	4. 3. 4. 3. 5.
K5081178AB-1 H4206674G-5	" "	CLB 115-2 CLB 115-7	115 115	110 110	$2^{1/2} \times 4^{1/8}$ 2 x 4 <sup>1</sup> / <sub>8</sub>	4.
5029710 K5081178AA-2	**	ETN 130	124-138	110	13/8 x 31/4	3.
16-2157 K5029710AD-2		CLB 150-1 ETN 175-2	150 161-180	110 110	$2\frac{1}{2} \times \frac{4\frac{1}{8}}{3\frac{1}{4}}$	4.
	" "	CLB 200-2 ETN 225-4	200 216-240	110 110	13/8 x 31/4 21/2 x 41/8 2 x 31/4 3 x 51/8 2 x 31/4	7. 5.
K5029710AD-1	11 11	CLB 300-1	300	110	$2^{1/2} \times 5^{1/4}$ 2 × 5 <sup>3/8</sup>	5. 10. 8.
H4206674GR7	" " "	ETN 400-1 CLB 135-1	378-420 135	110	21/2 x 41/8	5.
5929-1	General Household	JPW 80 JPW 80	80 80	110 110	3½ x 3½ x 2 3½ x 3½ x 2	3. 3.
6487 22846	Grigsby Grunow (Majestic)	CLB 115-3	115	110	3 x 4½ 2½ x 4½ 3 x 4½	4.
23907_		CLB 115-2	115	110	21/2 x 41/8	4.
101535 102356	Holtzer Cabot	ETN 175 ETN 55-1	161-180 53-60	110 110	13/8 × 41/8 11/2 × 23/4	2.
l ISEP	Howell Elec	ETN 130	124-138 145-162	110 110	13/8 × 31/4 11/2 × 31/4 2 × 31/4 2 × 31/4	3. 4.
135EP 150EP		ETN 155-1 ETN 175-2	161-180	110	2 x 3 1/4	4. 5. 5. 6.
175EP	" "	ETN 200-3 ETN 225-3	189-210 216-240	110 110	Z x 41/g	5.
250EP	" "	ETN 285-3 ETN 340	189-210 216-240 270-300 324-360	110 110	2 x 4½ 2 x 4½	6.
300EP	Hobart	CLB 115-10	115	110	2 x 4 <sup>7</sup> / <sub>8</sub>	4.
284-22 284-23	Janette Mf'g Co.	ETN 10017	54-66 76-84	250 250	21/2 x 41/8 3 x 41/8	14. 18.
284-23		CLB 115-7		110	2 x 41/a	
	Kingston Conley	ETN 130 CLB 135-1	115 124-138	110 110	2 x 41/8 13/8 x 31/4 21/2 x 41/8 21/2 x 41/8 21/2 x 41/8 21/2 x 41/8	4. 3. 5.
	., ., ., ., ., ., ., ., ., ., ., ., ., .	CLB 150-1	135 150	110	2½ x 4½	5.
	" "	CLO 30 CLO 40	30 40	220 220	13/8 x 31/4 21/2 x 41/8 21/2 x 41/8 21/2 x 41/8 21/2 x 41/8	5. 6.
172-2	Leland Elec. Co	LMW 150-1	150	110 110		5. 4.
1172-2 1172-1 1172-5	" " "	LMW 115 LMO 30-1	115 29 50	220	41/2 x 41/2 x 11/4	5.
173-2 173-3	" " "	CLB 50-2 CLB 80-2 CLB 100-3	50 80	110 110	2 x 5 <sup>1</sup> / <sub>4</sub> 2 <sup>1</sup> / <sub>2</sub> x 5 <sup>1</sup> / <sub>4</sub>	3.
173-5		CLB 100-3	100	110 110	41/2 x 41/2 x 11/2 41/2 x 41/2 x 11/4 41/2 x 41/2 x 11/4 21/2 x 51/4 21/2 x 31/4 13/8 x 31/4 13/8 x 31/4 2 x 41/8	4. 5. 4.
173-6 173-1	11 11 11 11 11 11 11 11 11 11 11 11 11	CLB 150-2 CLB 115-11	115	110	2½ x 5¼	4
173-9 173-11		CLO 25 CLO 20	25 20	220 220	21/2 x 51/4 21/2 x 51/4 21/2 x 51/4 21/2 x 51/4 21/2 x 51/4 21/2 x 51/4	3.
173-7	" " "	CLB 100-3 CLB 200-4	100 200	110 110	2½ x 5¼ 2½ x 5¼	4 7
173-10 448-1	" " "	CLB 100-3	100	110	2 <sup>1</sup> / <sub>2</sub> x 5 <sup>1</sup> / <sub>4</sub> 1 <sup>3</sup> / <sub>8</sub> x 4 <sup>1</sup> / <sub>8</sub>	4
9009-7 589 <b>-</b> 27		ETS 115 ETS 80	108-120 75-84	125 125	13/8 x 41/8 13/8 x 31/4	2
589-6		ETN 55-2 ETN 80	53-60 75-84	110 110	13/8 × 31/4 13/8 × 23/4 13/8 × 23/4 2 × 41/8	2 2
589-9 499-1	" " " " " " " " " " " " " " " " " " " "	CLB 80	80	110	2 x 4 <sup>1</sup> / <sub>8</sub>	3
589-10 589-11		ETN 90 ETN 100	86-96 97-107	110 110	13/8 X 31/4	3.3.3
589-12 589-14	11 11 11	ETN 115 ETN 155	108-120 145-162	110 110	13/8 x 31/4 13/8 x 31/4 13/8 x 41/8 13/4 x 41/8 21/2 x 41/8 13/8 x 41/8	3
589-17		ETN 205	194-216	110	13/4 x 41/8 21/2 x 41/8	5 4
499-6 589-22	" " "	CLO 25-I CLB 25	25 25	220 110	2½ x 4½ 1¾ x 4½	2
589-13	33 33 33	ETN 130 ETN 225	124-138 216-240	110 110	13/8 x 31/4 13/4 x 41/8	3. 5.
589-18 C29009-11	Leland Ltd.	ETN 90-1		110	13/8 x 41/8	3.
LC29009-3	'' ''	ETN 115-1 ETS 115	86-96 108-120 108-120	110 125	13/8 x 41/8 13/8 x 41/8 13/8 x 41/8 13/4 x 41/8 13/4 x 41/8	3. 3.
C29009-7 C29009-5	33 33	ETN 225 ETN 175	216-240 161-180	110 110	13/4 x 41/8	5. 4.
C29009-8	[	EIM 1/3	101-100	110	178 X 478	**

For a complete line of capacitors for capacitor motors and other continuous duty A. C. operated devices, ask your jobber for Catalog No. 162B describing a complete line of Dykanol Units in both cylindrical and rectangular containers, listing capacitors rated from 1 MFD. to 60 MFD. and from 110 V. A. C. to 660 V.

#### CORNELL-DUBILIER Exact Duplicate CAPACITORS

Mf'g. Part No.	Manufacturer	C. D. Catalog No.	Cap. MFD	A.C. Voltage	Dimensions L.W.H. or D.H.	List Price
2754	Marathon	ETO 35 ETN 285-3	23-30	220	13/8 x 41/8 2 x 41/8 2 x 41/8	5.00
2912	**	ETN 285-3 ETN 10035	270-300 400-450	110	2 x 41/8	6.50 9.50
2277	"	LMW 150-1	150	110	2 x 4 <sup>1</sup> / <sub>8</sub> 2 x 4 <sup>1</sup> / <sub>8</sub> 4 <sup>1</sup> / <sub>2</sub> x 4 <sup>1</sup> / <sub>2</sub> x 1 <sup>1</sup> / <sub>2</sub> 4 <sup>1</sup> / <sub>2</sub> x 4 <sup>1</sup> / <sub>2</sub> x 2 4 <sup>1</sup> / <sub>2</sub> x 4 <sup>1</sup> / <sub>2</sub> x 1 <sup>1</sup> / <sub>4</sub> 13/ <sub>8</sub> x 3 <sup>1</sup> / <sub>4</sub>	5.50
ue, r	11	LMW 175	175	110	$4^{1}/_{2} \times 4^{1}/_{2} \times 2$	6.6
		LMW 115	115	110	$41/2 \times 41/2 \times 11/4$	4.65 3.50
	.,	ETN 115	108-120	110	13/8 x 31/4	3.50
52193 52378	Master	ETN 115 ETN 130	108-120 124-138	110 110	1 <sup>3</sup> / <sub>8</sub> × 3 <sup>1</sup> / <sub>4</sub> 1 <sup>3</sup> / <sub>8</sub> × 3 <sup>1</sup> / <sub>4</sub>	3.8
52445	***************************************	ETN 175-3	161-180	iio	13/4 × 31/4	4.5
	Piqua Elec.	ETN 380CB	341-412	110	2 x 41/8	8.50
1457-L	Ohio Elec.	ETN 115	108-120	110	13/8 x 31/4	3.5
	11 11	ETN 115 CLB 100-1 CLB 115-2	100	110	$2^{1/8} \times 4^{1/8}$ $2^{1/2} \times 4^{1/8}$ $2^{1/2} \times 4^{1/8}$ $1^{3/8} \times 3^{1/4}$	4.2 4.6
		CLB 115-2 ETN 130	115	110 110	$2^{1/2}_{1/2} \times 4^{1/8}_{1/8}$ $1^{3/8} \times 3^{1/4}_{1/4}$	3.8
	11 11	ETN 155	124-138 145-162	110	13/a x 41/a	4.2
	** **	ETN 155 CLO 25-1	25	220	21/2 x 41/8	4.7
20250-5 20250-4	Robbins & Myers	ETM 120	124-138	110	13/8 x 31/4	3.8
20250-4	11 11 11 11 11 11 11 11 11 11 11 11 11	ETN 115 ETN 155 CLB 115-7 CLB 80 LMW 75 LMW 115	124-138 108-120 145-162	110 110	13/ <sub>9</sub> x 31/ <sub>4</sub>	3.50 4.2
20250-6 20251- <b>3</b>		CLB 115-7	145-162	110	$1\frac{3}{8} \times 4\frac{1}{8}$ $2 \times 4\frac{1}{8}$ $2 \times 4\frac{1}{8}$	4.6 3.7
20251	**	CLB 80	80	110	2 x 4½	3.7
	*** ***********************************	LMW 75	80 75 115	110	$4\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{1}{4}$ $4\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{1}{4}$	3.6 4.6
	" "	EMW 115 ETN 90	86-96	110	$4\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{1}{4}$ $4\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{1}{4}$ $1\frac{3}{8} \times 3\frac{1}{4}$	3.0
17177	Sunlight	CLB 115-3	115	110	3 x 41/8	4.6
201729		CLB 115-7	115	110	$2 \times 4^{1/9}$	4.6
201040	**	CLB 100-1	100	110	$2^{1/2} \times 4^{1/8}$ $2^{1/2} \times 4^{1/8}$	4.2
5201042 5201044		CLB 115-2	115 80	110	2½ x 4½ 2½ x 4½	4.6
201731	**	CLB 80-1 CLB 80	80	110	2½ x 4½ 2½ x 4½ 2 x 4½ 2 x 4½	3.7 3.7
5201733		CLB 100	100	110	2 x 4½	4.2
5201734		CLB 135-I CLB 65	135 · 65	110 110	21/2 x 41/8 2 x 41/8 2 x 41/8 2 x 41/8 2 x 41/8	5.1 3.4
5203421 5204001	"	CI O 20-1	20	220	2 x 41/8	3.8
5204009		CLO 20-1 CLO 15 CLO 35	15	220	$2 \times 4^{1/8}$	3.6
5204004	"	CLO 35	35	220	Z1/2 x 41/8	5.6 2.6
5205231 5205256	"	ETN 75-2 ETN 130	70-78 124-138	110 110	1 <sup>3</sup> / <sub>8</sub> x 2 <sup>3</sup> / <sub>4</sub> 1 <sup>3</sup> / <sub>8</sub> x 3 <sup>1</sup> / <sub>4</sub>	3.8
5205232		ETN 65-1	64-72	110	$13/_{8} \times 3^{1}/_{4}$	2.5
5205257		ETN 115	108-120	110	13/8 x 31/4	3.5 3.0
5205258 52050 <b>72</b>	11	ETN 90 ETN 155-3	86-96 145-162	110 110	$1^{3}/_{8} \times 3^{1}/_{4}$ $2 \times 3^{1}/_{4}$	4.2
5203291	"	CLB 135-1	135	110	$2^{1/2} \times 4^{1/8}$	5.1
5203457	**	ETN 115	108-120 124-138	110	13/8 x 31/4	3.5
5205028 5205030		JPZ 130 JPZ 155	124-138 145-162	110 110	$3\frac{1}{8} \times 4\frac{7}{8} \times \frac{11}{8}$ $3\frac{1}{8} \times 4\frac{7}{8} \times \frac{11}{8}$	3.8 4.2
HD5223-1	Wagner	JDS 100	100	110		4.2
HD5236-A1		JPW 100	100	110	31/2 x 31/2 x 2 31/2 x 31/2 x 2	4.2
HD4500-D2		JDS 115	115	110	$3\frac{1}{2} \times 3\frac{1}{2} \times 2$	4.6
HD4500-D3	**	JPW 115	115	110 220	$3\frac{1}{2} \times 3\frac{1}{2} \times 2$ $3\frac{1}{2} \times 3\frac{1}{2} \times 2$	4.6 4.7
HD4500-D3		JDO 25 JDS 100	25 100	110	31/2 X 31/2 X Z	4.2
HG7482	**	ETN 115	108-120	110	13% x 31%	3.5
HD5400 HC7684		JDS 115	115	110	31/2 × 31/2 × 2	4.6
HC7753		ETN 175-2	161-180 130-157	110 110	2 x 3 <sup>1</sup> / <sub>4</sub> 2 x 3 <sup>1</sup> / <sub>4</sub>	4.3
HC7950	"	ETN 145-2 ETN 340-1	320-360	110	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	7.5
S841011	Westinghouse	JPW 100	100	110	31/2 x 31/2 x 2	4.2
987252		CLB 115-7	115	110	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	4.6
987163 1030825	***	JPW 115	115	110 110	$3\frac{1}{2} \times 3\frac{1}{2} \times 2$ 2 × 3\frac{1}{4}	4.6
SH32291	***	ETN 130-2 CLB 115-11	124-138 115	110	2 <sup>1</sup> / <sub>2</sub> x 5 <sup>1</sup> / <sub>4</sub>	4.0
1030669	33	CLB 115-11 ETN 255-1 ETN 225-3	115 243-270 216-240	110	2 x 41/8	6.0
1030543	"	ETN 225-3	216-240	110	2 X 4 1/8	5.5
1030670 103071 <del>0</del>		ETN 400 ETN 175-2	378-420 161-180	110 110	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	8.5 4.5
1030813		ETN 175-2 ETN 130	124-138	110	13/8 x 31/4	3.8

All units are supplied with external insulating case or sleeve.

Extra Insulating Sleeve or Case
Terminal Cap
Mounting Bracket



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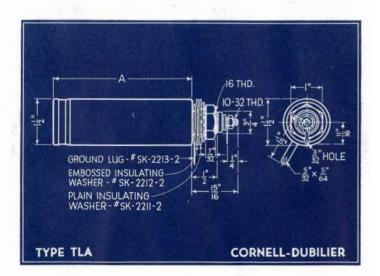
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- 1—DYKANOL (CHLORINATED DIPHENYL)\* IMPREGNATED AND FILLED\_LONG LIFE; SMALL SIZE; LOWER POWER FACTOR; NON-INFLAMMABLE
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- TI-LAMINATED KRAFT TISSUE HIGHER VOLTAGE BREAKDOWN;
- & IMPREGNATED \_ LOWER EQUIVALENT SERIES RESISTANCE;
- ETICALLY SEALED\_NOT AFFECTED BY MOISTURE, TIME OR TEMPERATURE O 200° F.
- DEQUATE TERMINAL INSULATORS—GLAZED PORCELAIN OR BAKELITE ACCORDING TO RATING
- \_NON-CORROSIVE, STRONG
- -STURDY STEEL CONTAINER, ALUMINUM PAINTED—NON-CORROSIVE, STRONG
  -IINIVERSAL STEEL MOUNTING STRAND ALLOWS MOUNTING UNIT IN ANY POSITION 8—UNIVERSAL, STEEL MOUNTING STRAP— 9—RIGIDLY TESTED—UNIFORM PRODUCT
- 10—CONSERVATIVE D. C. RATING—TRIPLE TESTING ASSURES DEPENDABLE SERVICE 11—APPROVED BY FIRE UNDERWRITERS—ABSOLUTELY SAFE UNDER ALL CONDITIONS; \*FIRE-PROOF; EXTRA HIGH DIELECTRIC STRENGTH

Cat. No.	Capacity Mfd.	Code Word	A B C D E F	Weight Per 100	List Price
	600	V D C440	rms Rect. A.C.		
TJU-6005	.5	TAJAZU	$2\frac{1}{8} \times 1 + \frac{3}{6} \times 1 + \frac{1}{16} \times \frac{7}{8} \times \frac{13}{6} \times 2\frac{1}{4}$	31½ lb.	\$2.05
TJU-6010	1	TAJEYU	$2\frac{1}{8} \times 1\frac{1}{16} \times 1\frac{1}{16} \times \frac{7}{8} \times \frac{1}{16} \times 2\frac{1}{4}$	333/4 "	2.75
TJU-6020	2	TAJIXU	$\frac{27}{8}$ x1 $\frac{16}{16}$ x1 $\frac{16}{16}$ x7 $\frac{7}{8}$ x $\frac{16}{16}$ x2 $\frac{17}{4}$	433/4 "	3.50
TJU-6040	4	TAJOWU	$3\frac{7}{16}$ x2 $\frac{1}{2}$ x1 $\frac{3}{16}$ x' $\frac{7}{8}$ x1 $\frac{1}{8}$ x3	70½ "	4.50
7	1000	V. D. C.—660	rms Rect. A.C.		
TJU-10005	.5	TEJABU	$2\frac{1}{8}$ x $1\frac{13}{16}$ x $1\frac{1}{16}$ x $\frac{7}{8}$ x $\frac{13}{16}$ x $2\frac{1}{4}$	32½ "	2.15
TJU-10010	1	TEJECU	$2\frac{1}{8} \times 1\frac{13}{16} \times 1\frac{1}{16} \times \frac{7}{8} \times \frac{13}{16} \times 2\frac{1}{4}$	333/4 "	3.00
TJU-10020	2	TEJIDU	4 $x1\frac{13}{16}x1\frac{1}{16}x\frac{7}{8}x\frac{13}{16}x2\frac{1}{4}$	541/2 "	4.00
TJU-10040	. 4	TEJOFU	$4\frac{13}{16}$ x2 $\frac{1}{2}$ x1 $\frac{3}{16}$ x $\frac{7}{8}$ x1 $\frac{1}{8}$ x3	125 "	5.00
TJU-10100	10	TEJYKU	$4\frac{13}{16} \times 33/4 \times 13/4 \times 7/8 \times 2 \times 43/8$	262½ "	9.00
TJU-10150	15	TEJHLU	$4\frac{13}{16}\times3\frac{3}{4}\times2\frac{1}{2}\times\frac{7}{8}\times2\times4\frac{3}{8}$	3311/4 "	12.00
17	1500	V. D. C.—1000	rms Rect. A.C.		
TJU-15010	1 .	TIJBAU	4 $x1\frac{13}{16}x1\frac{1}{16}x\frac{7}{8}x\frac{13}{18}x2\frac{1}{4}$	56½ "	3.50
TJU-15020	2	TIJDEU	$4\frac{5}{16} \times 2\frac{1}{2} \times 1\frac{3}{16} \times \frac{7}{8} \times 1\frac{1}{8} \times 3$	881/4 "	5.00
TJU-15040	4	TIJGIU	418x33/4x11/4x 7/8x2 x43/8	1841/2 "	7.00
TJU-15100	10	TIJKYU	$4\frac{13}{16}$ x3 $\frac{3}{4}$ x3 $\frac{3}{16}$ x $\frac{7}{8}$ x2 x4 $\frac{3}{8}$	4421/4 "	15.00
		. D. C.—1500		1 DF 16 1	
TJU-20010	1	TOJNOU	$3\frac{7}{16} \times 2\frac{1}{2} \times 1\frac{3}{16} \times 1\frac{1}{4} \times 1\frac{1}{8} \times 3$	771/2 "	4.50
TJU-20020	2	TOJOPU	$4\frac{1}{16}$ x 33/4 x 11/4 x 11/4 x 2 x 43/8	1591/2 "	5.50
TJU-20040	4.	TOJRIU	$4\frac{1}{16}$ x 3 3/4 x 2 1/4 x 1 1/4 x 2 x 4 3/8	2531/4 "	9.00
TJU-20100	10 ,	TOJWAU	$4\frac{13}{16}$ x3 $\frac{3}{4}$ x4 $\frac{9}{16}$ x1 $\frac{1}{4}$ x2 x4 $\frac{3}{8}$	5683/4 "	18.50
7.		7. D. C.—1800		1	
TJU-25010	1	TUJAAU	$3\frac{5}{16}$ x $3\frac{3}{4}$ x $1\frac{3}{4}$ x $1\frac{1}{4}$ x $2$ x $4\frac{3}{8}$	1811/4 "	8.00
TJU-25020	2	TUJEEU	$4\frac{13}{6}$ x 3 3/4 x 1 3/4 x 1 1/4 x 2 x 4 3/8	2591/2 "	13.00
TJU-25040	4	TUJIIU	$4\frac{1}{16}$ x 3 3/4 x 4 $\frac{9}{16}$ x 1 $\frac{1}{4}$ x 2 x 4 3/8	5061/4 "	18.00
TJU-25100	10	TUJUUU	$9_{16}^{1} \times 33/4 \times 4_{16}^{9} \times 1^{1}/4 \times 2 \times 57/8$	1025 "	45.00
2000 TATO No. 1	3000 V	. D. C.—2200			6
TJU-30010	1	TAKJAU	$4_{16}^{1} \times 3\frac{3}{4} \times 2\frac{1}{4} \times 1\frac{1}{4} \times 2 \times 4\frac{3}{8}$	2543/4 "	12.00
TJU-30020	2	TAIKEU	$4\frac{5}{16} \times 33/4 \times 3\frac{3}{16} \times 1\frac{1}{4} \times 2 \times 43/8$	350 "	15.00
TJU-30040	4	TAMIOU	$4\frac{3}{16}$ x $3\frac{3}{4}$ x $4\frac{9}{16}$ x $1\frac{1}{4}$ x 2 x $4\frac{3}{8}$	5433/4 "	22.00
	5000 V	/. D. C.—3300	rms Rect. A.C.	5.0.7 99	
TJU-50010	1	TEKEYU	$4_{16}^{5} \times 3\frac{3}{4} \times 4_{16}^{9} \times 2 \times 2 \times 4\frac{3}{8}$	5341/2 "	25.00
TJU-50020	2	TEKOPU	$6\frac{1}{16}$ x3 $\frac{3}{4}$ x4 $\frac{9}{16}$ x2 x2 x4 $\frac{3}{8}$	6933/4 "	32.00

NOTES: A notable record of performance is attested by the fact that Dykanol Capacitors rarely fail in service when operated even at 10% higher voltage than rating. Beware of imitations that look like TJU units! Don't buy "funny-name OIL" capacitors because of exaggerated claims made for them! Signal Corps, U. S. Army and Navy specifications call for these reliable filter units.





TYPE TLA, DYKANOL FILTER UNITS IN CYLINDRICAL aluminum containers, are not only classical in appearance but also in performance. Solving at once the need for a compact high voltage filter capacitor to use with high fidelity public address amplifiers, power supplies for short wave portable transmitters and transceivers, these well-built units are ideal in every respect. One terminal is well insulated, the other being the metal can itself. Substantially made, Type TLA will withstand transient voltages as well as high peak voltage surges and is designed to operate for continuous, full load duty.

## DYKANOL FILTER CAPACITORS

#### FEATURES OF TYPE TLA

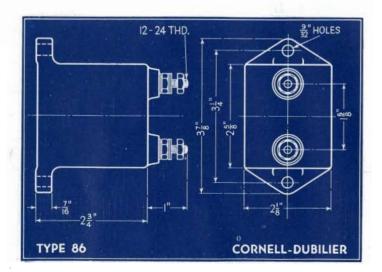
- 1—DYKANOL (CHLORINATED DIPHENYL)\* IMPREGNATED AND FILLED- LONG LIFE; SMALL SIZE; NON-INFLAMMABLE; LOWER POWER FACTOR
- 2—HI-PURITY ALUMINUM FOIL—LOWER R.F. RESISTANCE; LIGHT WEIGHT
- 3—HI-PURITY MULTI-LAMINATED KRAFT TISSUE HIGHER VOLTAGE BREAKDOWN; MINIMUM LEAKAGE; HIGH I. R.
- 4—VACUUM DRIED & IMPREGNATED LOWER EQUIVALENT SERIES RESISTANCE; LONGER LIFE
- 5—HERMETICALLY SEALED—NOT AFFECTED BY MOISTURE, TIME OR TEMPERATURE UP TO 200° F.
- 6-ADEQUATE TERMINAL INSULATOR-NO LEAKAGE OF CURRENT OR DYKANOL
- 7—STURDY ALUMINUM CONTAINER—STRONG; NON-CORROSIVE
- 8—INVERTED & VERTICAL MOUNTING—SIMPLE TO INSTALL—MECHANICALLY STRONG
- 9-RIGIDLY TESTED-UNIFORM PRODUCT
- 10-CONSERVATIVE D.C. RATING-TRIPLE TESTING ASSURES DEPENDABLE SERVICE
- 11—APPROVED BY FIRE UNDERWRITERS—ABSOLUTELY SAFE UNDER ALL CONDI-

TIONS; \*FIRE-PROOF; EXTRA HIGH DIELECTRIC STRENGTH

Cat. No.	Capacity Mfd.	Code Word	Size A B	Weight Per 100	List Price
34	4414.	Code Word	A D	1 61 100	Dist Tite
		600 V. D.	C.		
TLA-6020	2	TALAA	$27/8 \times 11/2$	36 lb.	\$2.25
TLA-6030	3	TELEA	$4\frac{1}{2} \times 1\frac{1}{2}$	43 "	2.75
TLA-6040	4	TILIA	$4\frac{1}{2} \times 1\frac{1}{2}$	46 "	3.00
		1000 V. D.	С.		7
TLA-10010	1	TALUE	$2\frac{7}{8} \times 1\frac{1}{2}$	28 "	2.25
TLA-10020	2	TALOI	$4\frac{1}{2} \times 1\frac{1}{2}$	44 "	2.75
		1500 V. D.	C.		
TLA-15005	.5	TULAM	$27/8 \times 1\frac{1}{2}$	28 "	2.75
TLA-15010	1	TULEN	$4\frac{1}{2} \times 1\frac{1}{2}$	40 "	3.00

NOTES: Insulating washers as well as a large spade lug are provided so that the metal container may be insulated from the chassis. Dykanol has a dielectric constant of 4.8, a power factor of .3%, and makes possible the fabrication of capacitors having a direct current resistance of 10,000 megohms per microfarad. No other type of capacitor has small size and such high insulation resistance. It also has an appreciably lower space factor which accounts for the substantial reduction in physical size for a given capacity and voltage rating. Providing safe, dependable performance, these capacitors truly exemplify: "More For Your Money in C-D's."





THE MICA DIELECTRIC CAPACITOR owes its origin to the inventive genius of William Dubilier. It was back in 1910, in the early days of wireless that the first practical mica units were made, tested and approved. Type 86 has been designed for amateur radio communication, 'fone, CW and ICW, for plate blocking, grid, buffer, tank, and antenna coupling purposes. Widely imitated, copied, but NEVER duplicated, these patented-construction units are serving in thousands of "ham" rigs with wonderful efficiency and amazingly superb results. You'll surely like 'em for your x-mitter.

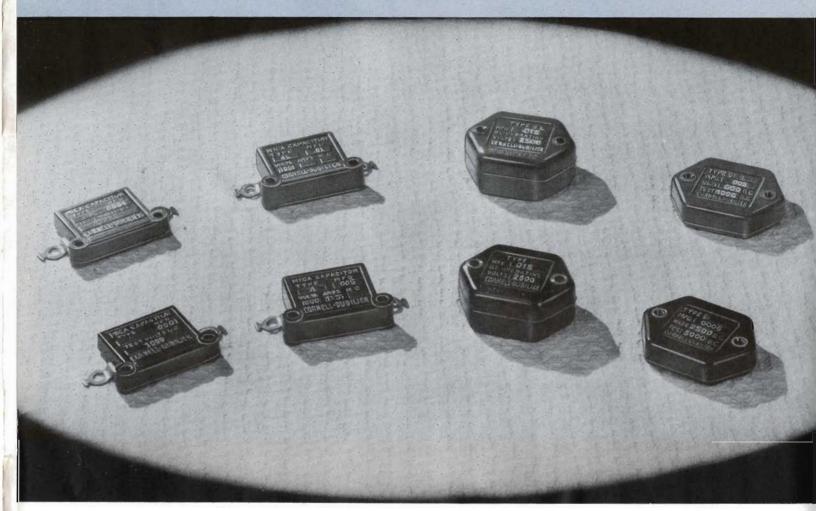
### AMATEUR MICA TRANSMITTING CAPACITORS

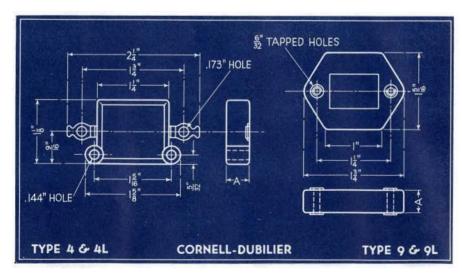
#### FEATURES OF TYPE 86

- 1-PATENTED SERIES MICA STACK-ELIMINATES CORONA LOSSES
- 2—HORIZONTAL STACK CONSTRUCTION—WIDE SEPARATION OF LEADS; MAXIMUM INSULATION
- 3—SOLDERED FOILS—AFFORDS HIGH CURRENT RATING
- 4—MICA SEPARATORS—EACH SECTION CAREFULLY INSULATED
- 5-INDIA RUBY MICA DIELECTRIC-LOW POWER FACTOR; HIGH Q
- 6-VACUUM IMPREGNATED ASSEMBLY-LOW LOSS; HIGH INSULATION; NO AIR VOIDS
- 7—SPECIAL LOW LOSS FILLER—REDUCES STRAY LOSSES
- 8—SHORT HEAVY BRASS STUD TERMINALS—LOW RESISTANCE CONNECTION
- 9-INSULATED CLAMP HOLDER-NO INTERNAL VOLTAGE ARC-OVER
- 10-BLACK GLAZED PORCELAIN DEHYDRATED CASE-LOW R.F. LOSSES

Cat. No.	Capacity Mfd.	Max. D.C. Voltage	Code Word	30mc 10 <b>M</b>	Max. C 15000kc 20M	urrent i 7500kc 40M	n Amps 3750kc 80M		Weight Per 100	List Pric
45 <b>A</b> -86	.00005	12,500	SABER	3.5	3	2.5	1.5	1	125 lb.	\$3.7
31 <b>A</b> -86	.0001	12,500	SABLE	5	5	4	3	2	125 "	3.7
325 <b>A</b> -86	.00025	12,500	SANER	5	7	8	6	4	125 "	3.7
<b>35A-</b> 86	.0005	12,500	SALVO	5	8	9	8	7	125 "	4.2
<b>35C</b> -86	.0005	7,000	SAPPO	5	7	8	6	4	125 "	3.7
21 <b>A-</b> 86	.001	12,500	SAVER	5	9	10	11	12	125 "	5.0
21 <b>C</b> -86	.001	7,000	SAFER	5	8	9	10	- 8	125 "	4.2
21 <b>D-</b> 86	.001	3,500	SALVE	5	8	9	8	5	125 "	3.7
215 <b>A</b> -86	.0015	12,500	SIEVE	6	9	10	11	12	125 "	5.5
22 <b>A</b> -86	.002	12,500	SOWER	6	9	12	13	15	125 "	6.5
22 <b>C</b> -86	.002	7,000	SORRY	6	8	9	10	10	125 "	° 5.2
22D-86	.002	3,500	SOFTY	6	8	8	9	7	125 "	4.2
25B-86	.005	10,000	SOUTH	7	10	13	14	15	130 "	9.5
11 <b>C</b> -86	.01	7,000	SINUS	7	10	13	15	15	125 "	9.5
11D-86	.01	3,500	SATIN	7	10	13	14	14	125 "	7.0
12D-86	.02	3,500	SONNY	7	10	14	16	17	125 "	8.7
LE-86	.1	2,000	SULKY	7	10	14	17	18	130 "	11.0

NOTES: By selecting the very best grade of india ruby mica, Type 86 capacitors have very low radio frequency resistance and power factor, but extremely high direct current resistance and negligible power losses. The patented design has successfully eliminated corona and reduces internal heating, so that the Q or quality characteristic, so important to amateur communication on high frequencies, is exceptionally high. Dielectric loss in these units is remarkably low, thereby permitting long periods of heavy duty operation without an appreciable change in electrical constants. You'll find it pays to insist on C-D'S!





THE EVOLUTION OF THE ORIGINAL SMALL "MICADON" capacitor has resulted in the perfection of Types 4 and 9 mica units. Effectively used for radio frequency bypass, high voltage D.C. blocking, low power tank capacitors, padders, coupling functions, audio and video purposes. Using the finest quality india ruby mica, select foil and the exclusive C-D stack assembly, these units, obtainable in safe, dependable voltage ratings, are hermetically encased in rich brown bakelite, beautifully moulded.

On special order, low-loss bakelite units may be obtained at 25c. list price extra.

NOTES: The terminal studs in Type 9 are moulded into the case; Type 4 uses short solder-lug terminals and has insulated mounting holes for panel mounting. Types furnished from stock have reasonably close tolerance limits. For 5% tolerance add 10% to list price; for 2% tolerance, add 20% to list price. The letter "L" must be used to denote special low-loss bakelite, viz: 4L-6S1; 9L-25D2. Because of their superior design and construction these units are widely used in aircraft, marine, portable and short-wave transmitters. Standard with broadcast engineers, amateurs and manufacturers of transmitting equipment.

### MICA RECEIVING-TRANSMITTING CAPACITORS

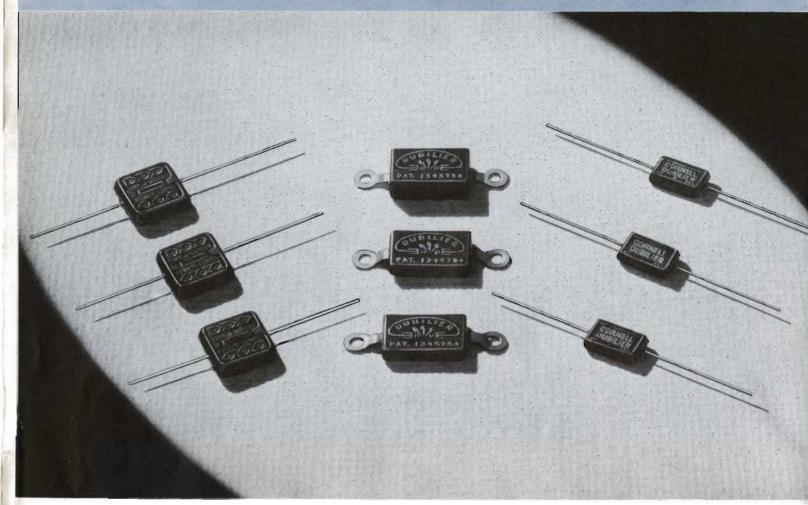
#### FEATURES OF TYPES 4 and 9

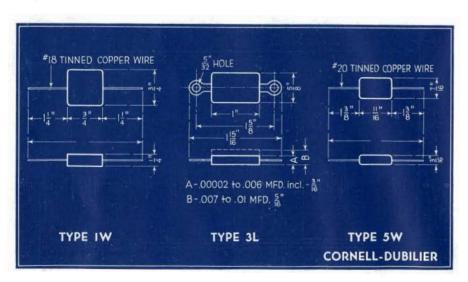
- 1—INDIA RUBY MICA DIELECTRIC—LOW POWER FACTOR; HIGH Q; LONG LIFE 2—MICA OF STEPPED UNIFORM THICKNESS—PROVIDES HIGH FACTOR OF SAFETY
- 3—SPECIALLY-TREATED STACK ASSEMBLY—AFFORDS HIGHER VOLTAGE BREAKDOWN 4—VACUUM DRIED STACK TREATMENT—LOW LOSS; HIGH INSULATION RESISTANCE 5—NO MAGNETIC MATERIAL USED—REDUCES LOSSES AT ALL FREQUENCIES
- 6-MOULDED IN BAKELITE-STRONG: MINIMUM LEAKAGE; EXCÉLLENT APPEAR-
- ANCE; MOISTURE-PROOF

  7—SHORT HEAVY TERMINALS—INSURES GOOD ANCHORAGE; MOUNTING ACCURACY

  8—EXCELLENT TEMPERATURE COEFFICIENT—PRACTICALLY CONSTANT CAPACITY OVER WIDE RANGE OF TEMPERATURE

						1					
C-4	Con	Code	7	Wt. lbs		Cat	Can	Codo		Wt. lbs	
Cat. No.	Cap. Mfd.	Code Word	"A"		List Price	Cat. No.	Cap. Mfd.	Code Word	"A"		List Price
-						-1101					
		TYPE 4						TYPE 9			
1000 77 1	D C Test	; Working V	'altaga 6	500 37	D.C	1000 V.I	D.C. Test:	Working	Voltage	600 <b>V</b>	D.C.
1000 4.1	D.C. Test	, working v	ortage (	000 <b>v</b>	.D.C.			_	_		
4-6Q3	.00003	HAQUE	11/32"	3	\$.35	9-6Q5 9-6T1	.00005 .0001	HORDE HORNE	7/16"	$\frac{51/2}{51/2}$	\$.40 .40
4-6Q4	.00004	HAKNY	"	3	.35	9-6T15	.00015	HORPO	**	$5\frac{7}{2}$	.40
4-6Q5 4-6T1	.00005 .0001	HABIT	"	3 3	.35 .35	9-6T2	.0002	HORSE	44	51/2	.40
4-6T15	.0001	HADES HADOK	"	3	.35	9-6T25	.00025	HOTEL	**	51/2	.40
4-6T2	.0002	HAIRY	"	3	.35	9-6T5	.0005	HOUSE	"	51/2	.40
4-6T25	.00025	HALVE	"	3	.35	9-6D1 9-6D15	.001 .0015	HOVEL HOVER	"	$5\frac{1}{2}$ $5\frac{1}{2}$	.50 .50
4-6T3	.0003	HALVA	"	3	.35	9-6D13	.0013	HUMAN	**	$5\frac{1}{2}$	.50
4-6T4	.0004	HALUP	"	3 3	.35 .35	9-6D25	.0025	HUNIP	"	51/2	
4-6T5 4-6D1	.0005 .001	HANDY HAPLY	"	3	.40	9-6D3	.003	HUMID	"	61/4	.60
4-6D15	.0015	HAPPY	"	3	.45	9-6D4	.004	HUMOR	"	61/4	.60
4-6D2	.002	HARDY	"	3	.45	9-6D5	.005 .006	HUNCH	"	61/4	.70 .85
4-6D25	.0025	HARZE	"	3	.50	9-6D6 9-6D7	.007	HUNLU	"	6½ 6¼	.95
4-6D3	.003	HAREM	"	3	.55	9-6D8	.008	HURRY	"	61/4	
4-6D4 4-6D5	.004 .005	HARPY HARRY	"	3 3	.55 .55	9-6S1	.01	HUSSY	"	61/4	1.15
4-6D6	.005	HARSH	"	3	.65	9-6S15	.015	HUTCH	"	61/4	
4-6D7	.007	HARAH	"	3	.70	9-6S2	.02	HUZZA	"	7 7	1.85
4-6D8	.008	HASTE	"	3	.75	9-6 <b>S2</b> 5 9-6 <b>S</b> 3	.025 .03	HYENA HYSON	44	121/2	2.30 2.50
4-681	.01	HASTY		3	.80	9-6\$4	.04	ICHOR	3/4"	121/2	
4-6\$15	.015 . <b>02</b>	HATCH HAUNT	7/16″	5 5	1.10 1.20	9-685	.05	IDEAL	**	121/2	3.85
4-6\$2 4-6\$25	.025	HAVEN	"	5	1.45	9-6 <b>S</b> 6	.06	IDAHO	"	121/2	
4-6S3	.03	HAYAY	"	5	1.70	2500 V I	C Test	Working V	Voltage 1	200 V	D.C.
					_		.00005	IDIOT	7/16"		
2500 V.I	D.C. Test;	Working Vo	oltage 12	200 V	.D.C.	9-12Q5 9-12T1	.0001	ILEUM	//10	$\frac{51/2}{51/2}$	.70 .70
		1900				9-12T2	.0002	IMAGE	"	51/2	.70
4-12Q5	.00005	HAVOC HAZEL	11/32"	3	.60 .60	9-12T25	.00025	IMAGO	"	51/2	.70
4-12T1 4-12T2	.0001 .0002	HEADY	"	3	.60	9-12T5	.0005	IMBED	"	51/2	.70
4-12T25	.0002	HEART	44	3	.60	9-12D1 9-12D15	.001 .0015	IMBUE	"	51/2	.90
4-12T3	.0003	HEASU	"	3	.60	9-12D13	.0013	IMPLY	"	5½ 5½	1.15 1.35
4-12T5	.0005	HEATH	"	3	.60	9-12D26	.0025	IMPOX	"	51/2	1.45
4-12D1	.001	HEAVE	"	3	.75 .85	9-12D3	.003	INANE	¥	61/4	1.55
4-12D15 4-12D2	.0015 .002	HEDGE HELIX	"	3	.95	9-12D4	.004	INAPT	"	61/4	
4-12D25	.0025	HELUY	"	3	1.10	9-12D5 9-12D6	.005 .006	INCUR	"	6½ 6¼	1.75 1.75
4-12D3	.003	HELLO	"	3	1.20	9-12D8	.008	INDEX	46	61/4	2.25
4-12D4	.004	HELOT	"	3	1.50	9-12S1	.01	INDIA	"	61/4	2.80
4-12D5	.005 .006	HELVE HENCE	7/16"	5 5	1.50 1.70	9-12S15	.015	INDIC	"	61/4	3.35
4-12D6 4-12D8	.008	HENNA	"	5	2.00	9-12S2	.02 .025	INDUC	3/4"	121/2	3.95
4-12S1	.01	HERON	"	5	2.35	9-12S25 9-12S3	,03	INERT	"	$\frac{12\frac{1}{2}}{12\frac{1}{2}}$	4.40 4.60
<del>                                     </del>									7 14 -		
5000 V.I	O.C. Test:	Working Vo	ltage 25	500 V	.D.C.			Working V	_		
		1000	100			9-25Q5	.00005	INFER	7/16		
4-25Q5	.00005	HINNY	11/32"	3	.70	9-25T1 9-25T2	.0001	INGLE INGOT	**	51/2	.90 1.05
4-25T1	.0001	HITCH	"	3 3	.70 .90	9-25T25	.00025	INLAW	"	$\frac{51/2}{51/2}$	1.05
4-25T2 4-25T25	.0002 .00025	HIVES HOARY	"	3	.90	9-25T5	.0005	INLAY	44	51/2	1.25
4-25T3	.00023	HOAUH	"	3	1.10	9-25D1	.001	INLET	"	51/2	1.50
4-25T5	.0005	HOBBY	"	3	1.25	9-25D15	.0015 .002	INNER INURE	"	51/2	1.95
4-25D1	.001	HOIST	"	3	1.50	9-25D2 9-25D25	.002	INUSH	"	$\frac{51/_{2}}{51/_{2}}$	2.25 2.50
4-25D15	.0015	HOLLA HOLLY	 7/16″	3 5	1.95 2.25	9-25D23 9-25D3	.0023	INURN	"	61/4	2.75
4-25D2 4-25D25	.002 .0025	HOLPE	7/10	5	2.50	9-25D4	.004	IONIC	4.6	61/4	3.15
4-25D23	.0023	HONEY	"	5	2.75	9- <b>25</b> D5	.005	IRONY	"	61/4	<b>3.4</b> 0
4-25D4	.004	HONOR	"	5	3.15	9-25D6	.006	ISLET		61/4	
4-25D5	.005	HONIK	"	5	3.50	9-25D8 9-25S1	.008 .01	ISSUE IVIED	3/4"	$\frac{12\frac{1}{2}}{12\frac{1}{2}}$	3.80 4.10
NOTE: 1	Low Loss 1	ınits are 20% I	heavier.			9-25S1 9-25S15	.015	IVORY	"	121/2	4.50
										/2	





MOULDED BAKELITE RECEIVING CAPACITORS TYPES 1W, 3L and 5W serve many important functions in receivers and hence their design and construction is such that they contribute to the successful performance of the various circuits in which they are employed. Tested at 1000 volts D.C., (on capacities up to .003 mfd.; 600 V test on higher capacities), checked for accuracy of capacity by an electrical testing and sorting machine, these tiny units are characteristic of the quality which C-D builds into its every product, regardless of size or price. The efficiency of these small capacitors is better than 99.94%!

## MICA RECEIVING CAPACITORS

### FEATURES OF TYPES 1W, 3L and 5W

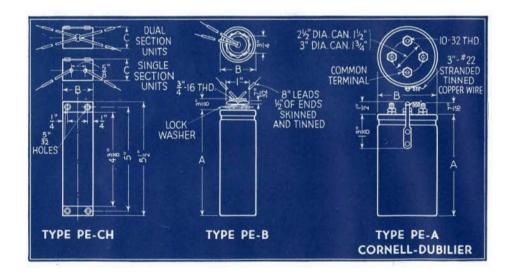
- 1-INDIA RUBY MICA DIELECTRIC- LOW POWER FACTOR; HIGH Q; LONG LIFE
- 2-RIGIDLY TESTED MICA- UNIFORM PRODUCT; HIGH FACTOR OF SAFETY
- 3-SPECIAL WAX-TREATED STACK- AFFORDS HIGHER VOLTAGE BREAKDOWN
- 4-VACUUM DRIED STACK TREATMENT- LOW LOSS; HIGH INSULATION RESISTANCE
- 5-NO MAGNETIC MATERIAL USED- NO WAVE FORM DISTORTION; REDUCES LOSSES
- 6—ENCASED IN BROWN BAKELITE— STRONG; MINIMUM LEAKAGE; EXCELLENT AP-PEARANCE: MOISTURE-PROOF
- 7—POSITIVE TERMINAL CONNECTIONS— INSURES GOOD ANCHORAGE; NO EXTRA CONTACT RESISTANCE

Lis Pri	Code Word	Cat. No.	Code Word	Cat. No.	Code Word	Cat. No.	Cap. Mfd.
	TYPE 5W	1	E 3L	TYP		YPE 1W	т
\$.:	TYNEA	5W-5V5					.000005
.2	TYNEE	5W-5V75	nt Per 100	Weigh	Per 100	Weight	.0000075
.2	TYNAU	5W-5Q1	.005, inclusive		009, inclusive		.00001
	TYNTE	5W-5Q2	1/2 lbs.		1b.		.00002
.2	TYNIA	5W-5Q25	.01, inclusive		03, inclusiv <b>e</b> á lbs.		.000025
3 1	TYNIO	5W-5Q3	94 105.		06, inclusive		.00003
Wester	TYNOE	5W-5Q4			ibs.	11,	.00004
.1	TYNAP	5W-5Q5				0	.00005
.:	TYNEX	5W-5Q7					.00007
	TYNOL	5W-5T1	GRIPE	3L-5T1			.0001
	TYNTO	5W-5T15	GRIKK	3L-5T15			.00015
	TYNEK	5W-5T2	TRAKU	3L-5T2			.0002
	TYNUM	5W-5T25	GROYN	3L-5T25			.00025
	TYNOR	5W-5T3	TRALP	3L-5T3			.0003
	TYNKU	5W-5T4	TRAMP	3L-5T4			.0004
	TYNUZ	5W-5T5	GROAN	3L-5T5			.0005
			GROBY	3L-5T6	UNSUP	1W-5T6	.0006
	1		TREPT	3L-5T7	UNSET	1W-5T7	.0007
	Per 100	Weight P	TREED	3L-5T8	UNSYK	1W-5T8	.0008
	b.	1/2 11	TREOH	3L-5T9	UNSOB	1W5T9	.0009
		(5)	GROAT	3L-5D1	UNDIT	1W-5D1	.001
77			TRELM	3L-5D15	UNDIX	1W-5D15	.0015
			GROID	3L-5D2	UNDOT	1W-5D2	.002
			TREHN	3L-5D25	UNPUT	1W-5D25	.0025
			GROOM	3L-5D3	UNPIN	1W-5D3	.003
		5-0	GROSS	3L-5D4	UNLIT	1W-5D4	.004
			GROUP	3L-5D5	UNLOX	1W-5D5	.005
			GROUT	3L-5D6	UNLAG	1W-5D6	.006
			GREPX	3L-5D7	Old Control		.007
2	W. C.	- 3. 1	GRITN	3L-5D75	70,		.0075
			GRUKT	3L-5D8	201v		.008
			GRUZZ	3L-581			.01

#### NOTES:

Stock units are 10% tolerance. If special low-loss bakelite is required, add 25c to list price. (When ordering low loss units add "L" to Cat. No. viz: 5WL-5T1; 3LL-5S1). When 5% tolerance is needed, add 10% to list price; for 3% tolerance, add 20% to list price. As an example of the excellence of these units, a .0001 mfd. capacitor has a leakage resistance of 100,000,000,000 ohms! On a sensitive galvanometer, the needle deflection cannot be detected, so insignificant is the D.C. current flow.





PAPER REPLACEMENT CAPACITORS THAT SIMULATE electrolytics in appearance, Types PE-A, PE-B and PE-CH are fulfilling a real service need. The actual capacity of these units is from 1/3 to 1/2 of the usual value employed when using electrolytics, and this capacity is limited solely by the size of the container. In most instances it is practical to replace electrolytics and get satisfactory operation. Another important asset inherent in these units is their high voltage breakdown which an electrolytic does not afford. There is no polarity to observe when using these capacitors.

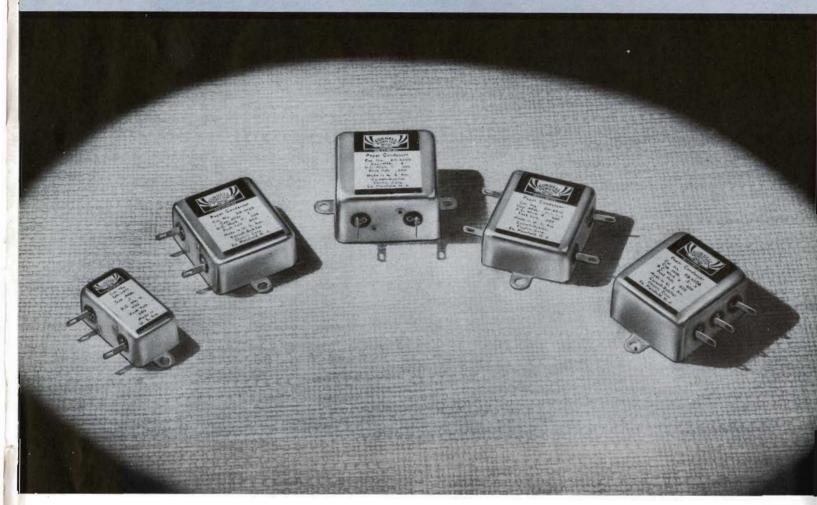
### PAPER DIELECTRIC FILTER CAPACITORS

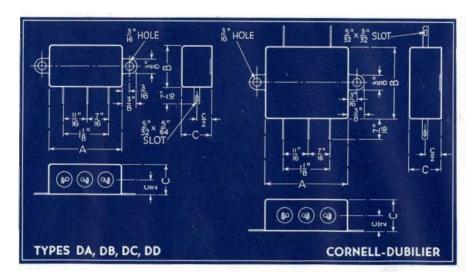
### FEATURES OF TYPES PE-A, PE-B and PE-CH

- 1—HALOWAX IMPREGNATED DECREASED PHYSICAL SIZE
- 2—HI-PURITY ALUMINUM FOIL—LOWER R.F. RESISTANCE; LIGHT WEIGHT
- 3—HI-PURITY MULTI-LAMINATED KRAFT TISSUE—HIGHER VOLTAGE BREAKDOWN; MINIMUM LEAKAGE
- 4-OIL-COOLED-HIGHER VOLTAGE BREAKDOWN
- 5—VACUUM DRIED & IMPREGNATED—LOWER EQUIVALENT SERIES RESISTANCE; LONGER LIFE
- 6-RIGIDLY TESTED-UNIFORM PRODUCT
- 7—SECURE LEADS AND TERMINALS—POSITIVE CONNECTIONS UNDER ALL CONDITIONS
- 8-CONTAINERS, CARDBOARD & ALUMINUM-LIKE ELECTROLYTICS IN APPEARANCE
- 9-CONSERVATIVE D.C. RATING-TRIPLE TESTING ASSURES DEPENDABLE SERVICE
- 10—SPECIAL, COMPLETE POTTING—ADDED PROTECTION AGAINST HUMIDITY

Cat. No.	"Replacement" For Electrolytic Capacity Mfd.	Actual Mfd. Capacity	Code Word	A	В	С	Wt. lbs. Per 100	List Price
			TYPE PE-CH					
	1000 V.D.	.C. Test; 600	V.D.C. Peak	450 V	D.C.	Worki	ng	
PE-CH-4004	4	2	PECPA	43/8 2	13/8	x 11	22	\$.90
PE-CH-4008	8	31/2	PECRY		$1\frac{3}{8}$		31	1.15
PE-CH-4808	8-8	23/4-23/4	PECSI		15/8		70	1.90
	1200 V.D.	C. Test; 800	V.D.C. Peak	600 V	D.C.	Worki	ng	
PE-CH-6004	4	2	PECTO	43/8 2	13/8	K 15	27	1.20
PE-CH-6008	8	3	PECXA		15/8		42	1.60
PE-CH-6808	8-8	23/4-23/4	PECYN		2 :		75	2.65
		45.	TYPE PE-B				1 32 1	انچ
	1200 V.D.	.C. Test; 800	V.D.C. Peak	600 V	D.C.	Worki	ng	
PE-B-6004	4	13/4	PEBAZ	43/8 2	13/8		30	1.35
PE-B-6008	8	23/4	PEBEY	43/8 >			37	1.75
PE-B-6808	8-8	13/4-13/4	PEBOW	43/8 2	11/2		44	2.80
			TYPE PE-A					
	1200 V.D.	.C. Test; 800	V.D.C. Peak	600 V.	D.C.	Worki	ng	
PE-A-6444	4-4-4	11/2-11/2-11/2	PEADE	43/8 >		V 1	113	3.50
PE-A-6888	8-8-8	23/4-23/4-23/4	PEAFO	43/8 3			150	4.90
PE-A-6918	9-9-18	3-3-6	PEAGU	43/8 x	3		154	6.50

NOTES: In Types PE-B and PE-CH, the dual section units have separate leads, a set of two leads of one color identify the terminals for each capacity. In Type PE-A triple section units, the common terminal stud is insulated, with provision made to ground same by means of a small wire lead soldered to the grounding lug on the metal container. For most circuits, it is recommended that a 600-volt rated unit be used at least across the output of the rectifier tube. If all traces of hum are not eliminated, an additional "filter" capacitor is suggested.





C-D "BATHTUB" METAL SHELL TYPE DA to DD capacitors are non-inductively wound, are well protected against climatic conditions and are available in a large variety of ratings, making them quite popular and useful not only for radio frequency bypass but also for audio frequency coupling and bypass functions. Lug terminals are amply insulated. Integral with casing, the mounting feet allow ease of assembly. These units are wax-potted, but it must be remembered, that for extra severe humidity applications, as in tropical climates, a substitute is recommended in our Type DY (Cat. No. 160).

### CASED PAPER DIELECTRIC CAPACITORS

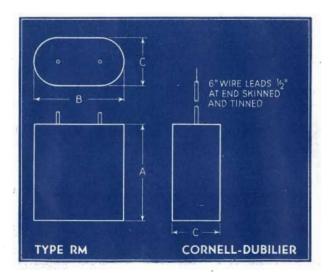
### FEATURES OF TYPES DA, DB, DC, and DD

- 1—HALOWAX IMPREGNATED—DECREASED PHYSICAL SIZE
- 2-HI-PURITY ALUMINUM FOIL-LOWER R.F. RESISTANCE; LIGHT WEIGHT
- 3—HI-PURITY MULTI-LAMINATED KRAFT TISSUE-HIGHER VOLTAGE BREAKDOWN; MINIMUM LEAKAGE
- 4—VACUUM DRIED & IMPREGNATED —LOWER EQUIVALENT SERIES RESISTANCE; LONGER LIFE
- 5-OIL-COOLED-HIGHER VOLTAGE BREAKDOWN
- 6-RIGIDLY TESTED-UNIFORM PRODUCT
- 7-WELL INSULATED LUG TERMINALS-NO LEAKAGE TO CONTAINER; STRONG
- 8—CONTAINERS—SMALL DRAWN METAL SHELL: CONVENIENT MOUNTING
- 9-CONSERVATIVE D.C. RATING-TRIPLE TESTING ASSURES DEPENDABLE SERVICE
- 10—SPECIAL, COMPLETE POTTING-ADDED PROTECTION AGAINST HUMIDITY

Cat. No.	Capacity Mfd.	Code Word	А		Size B	C	Weig Per 1		List Price
Cat. Ito.	Wille	Code Word	A				reii	00	Dist Frice
		TYPE I	DA						
		400 V.	D. C.						
DA-4011	.1	ACERA	$1\frac{13}{16}$	x 1	ι :	x 3/4	61/4 1	lb.	\$.50
DA-4025	.25	ACHAR	$1\frac{13}{16}$	x 1	l :	x 3/4	71/2	"	.60
DA-4050	.5	ACHIA	$1\frac{1}{16}$	x 1	. :	κ <sup>7</sup> / <sub>8</sub>	8	66	.75
DA-4100	1	ACHOR	2	x 1	3/4	x 13			1.00
DA-4200	2	ACTUS	2	<b>x</b> 2	2 :	x 1½	25	"	1.55
		600 V.	D. C.						
DA-6011	.1	ACORN	1 13	x 1	. :	k 3/4	71/4	"	.60
DA-6025	.25	ACRIS	$1\frac{13}{16}$	<b>x</b> 1	1/4 :	k 3/4	10	"	.70
DA-6050	.5	ACRYL	2	<b>x</b> 1	3/4	к <del>13</del>	143/4	"	.95
DA-6100	1	ACTON	2	x 2	2 :	x 1½	26	"	1.50
		TYPE DB-D	C-DE						7"
		400 V.	D. C.						
DB-4010	.11	ADACT	113	x 1	. ;	x 3/4	71/2	"	.65
DB-4025	.2525	ADAGA	2	x 1	1/4 :	x 3/4			.80
DB-4050	.55	ADAGE				к 1	173/4		1.00
DC-4010	.111	ADAGY				x 3/4			.85
DD-4010	.111	ADATI				K 13.	15		1.10

NOTES: In the single and dual section capacitor units, the terminals are insulated from the container. The duals have three terminals, the common lug being on the left. In the triple and quadruple section capacitors, the common terminal connection is grounded to the metal case. When you buy a C-D capacitor you buy not only the concentrated knowledge and experience of 28 years of exclusive capacitor manufacturing behind it, but you are certain of getting the same inbuilt quality in a single unit as in 1,000,000! This is true because of the extra inspection made economically possible with vast productivity. Try them and see for yourself!





TYPE RM UNCASED FILTER CAPACITORS have been made available to repair paper dielectric "filter blocks" which were used in the early models of A.C. operated radio sets. Small, compact and carefully sealed to withstand the ravages of humidity and temperature, they serve to repair these old time receivers to which their owner may have developed a sort of sentimental attachment. Also useful in the elimination of electrical interference caused by push-buttons, bells, buzzers and the like. Individually wrapped in cellophane.

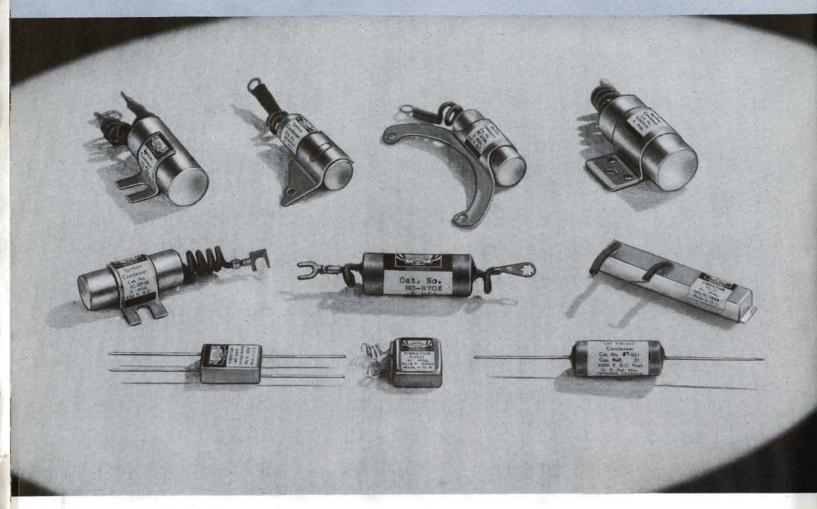
### UNCASED PAPER DIELECTRIC CAPACITORS

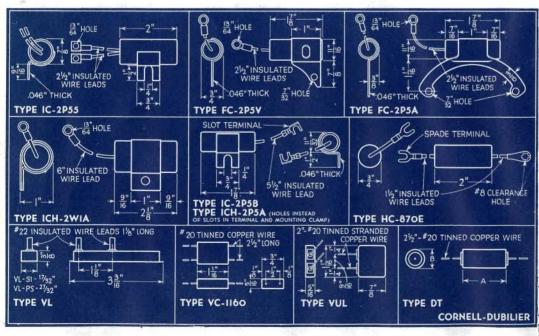
#### FEATURES OF TYPE RM

- 1—HALOWAX IMPREGNATED DECREASED PHYSICAL SIZE
- 2-HI-PURITY ALUMINUM FOIL LOWER R.F. RESISTANCE; LIGHT WEIGHT
- 3—HI-PURITY MULTI-LAMINATED KRAFT TISSUE— HIGHER VOLTAGE BREAKDOWN; MINIMUM LEAKAGE
- 4-VACUUM DRIED & IMPREGNATED LOWER EQUIVALENT SERIES RESISTANCE;
- 5-OIL-COOLED- HIGHER VOLTAGE BREAKDOWN
- 6-RIGIDLY TESTED- UNIFORM PRODUCT
- 7—FLEXIBLE LEADS SECURELY SOLDERED TO FOIL TABS—MINIMIZES OPEN CIRCUITS
- 8—MOISTURE-PROOF HIGH TEMPERATURE WAX SEALED—BEST POSSIBLE PROTECTION
- 9—CONSERVATIVE D.C. RATING—TRIPLE TESTING ASSURES DEPENDABLE SERVICE
- 10—SPECIAL HEAVY PROTECTIVE WRAPPER—EXTRA PROTECTION, ELECTRICALLY & PHYSICALLY
- 11—CELLOPHANE ENVELOPE—KEEPS UNIT FRESH FOR FUTURE USE

Cat. No.	Capacity Mfd.	Code Word	A		Size B		С	Wei Per		List Pric
		TYPE I	RM							
		400 V. I	). C.							
RM-4050	.5	JENNY	2	x	1	x	1/2	41/4	1b.	\$.50
RM-4100	1	JERRY					11	83/4	46	.75
RM-4200	2	JETTY	2	x	17/8	x	1			1.15
RM-4400	4	JOINT	33/8	x	17/8	x	11/8			2.00
		600 V. I	). C.			Y				
RM-6010	.1	JOKER	2	x	1	x	3	23/4	"	· .40
RM-6025	.25	JOLLY						31/2		.50
RM-6050	.5	JOULE	2					71/4		.60
RM-6100	1	JUDGE			17/8		, –		"	.90
RM-6200	2	JUICE						293/4	"	1.35
RM-6400	4	ЈИМВО	41/4					53	"	2.70
		1000 V. I	D. C.				Sec.		Ŋ.	
RM-10100	1	KIOSK	41/4	x	17/8	x	7/8	36	"	1.50
RM-10200	2	KNACK	41/4	x	17/8	x	13/4	50	"	2,50

NOTES: The above listed variety of Type RM units will be found to serve practically every replacement need. Special capacitor "blocks" can be made up and potted into suitable containers by Servicemen to fulfill any requirements. Servicemen, especially those confronted with high voltage power pack problems, with power transformers having poor voltage regulation and contending with circuits wherein exceptionally high peak voltage surges develop welcome these dependable filter capacitors. Long wire leads facilitate ease of hook-up.





Automobile radio during the last five years, has taken tremendous strides. Reception of music and speech with an automobile radio receiver, operating from the car's storage battery is clear, quiet and of excellent quality, simulating a home radio receiver's performance. To make this possible, the above photograph illustrates some of the various types of capacitors which have been brought out to meet the problems of vibrator "B" supply filters, generator commutator and switch noise suppression for automo-

The mechanical design of these capacitors insures against damage by the high temperatures and excessive vibration existing under the hood of an auto. Special units such as these are designated for certain particular installations. Thus, for instance, the Ford generator condensers have special mounting brackets. The vibrator capacitors are oil-treated to withstand high peak and surge voltages, up to 3000 V.

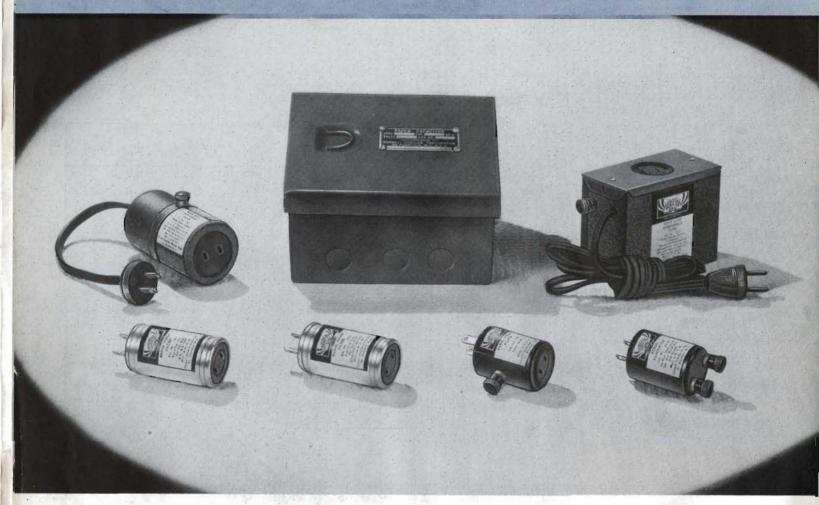
### AUTO GENERATOR AND VIBRATOR CAPACITORS

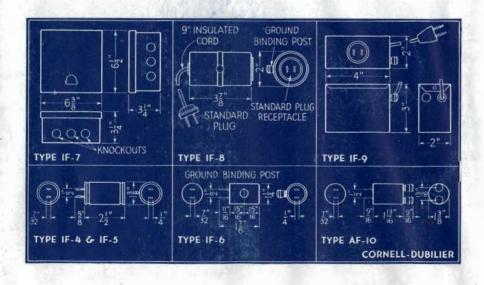
#### C-D AUTO RADIO FILTER UNITS

Thorough impregnation and sealing keep these little capacitors impervious to weather conditions. All leads are firmly anchored, all seams of metal units carefully soldered. Substantially made, these will outlast the associated equipment for which they are intended.

Cat. No.	Capacity Mfd.	Code Word	A		Size B	С	Wei Per		List Pric
		GENERATOR	UN	ITS					7
IC-2P5B	.5	ICGEN	115	x	11		73/4	1b.	\$.50
ICH-2P5A	.5	ICHIN	1 15				73/4		.50
FC-2P5A	.5	FORDE	115				91/2		.50
FC-2P5V	.5	FORDU	115				9	44	.50
IC-2P55	.55	ICDUO	2				16	44	.75
ICH-2W1A	1	ICHOW	$2 \tfrac{3}{16}$				171/4	"	.70
		AMMETER	ואט	T				100	
HC-870E	.5	HIAMP	2	x	3/4		5	"	.45
Victoria		VIBRATOR	LUN	ITS				12-19	
Meta	l "postage stamp" ca	pacitors, with two in	nsulate	ed 1	leads (oi	1 filled	1, 2000	V. Pe	ak)
VUL-D7	.007	VULAZ	1	x 1	11/8 x9/3	2	8	"	.45
VUL-D8	.008	VULEY			11/8 x9/3		8	"	.45
VUL-S1	.01	VULIX			11/8 x9/3		8	"	.45
VUL-S2	.02	VULOW	1	x i	1½ x9/3	2	8	**	.45
	Metal shell	units for old style	vibrato	r "	B" supp	ly uni	ts		
VL-S1	.01 (1500V)	VELKO	$3\frac{3}{16}$	x17	7/32x 3	8	33/4	"	.60
VL-P5	.5 (200V)	VELOP	3 3	x27	7/32x 3	8	8	4	.65
	Special of	lual .0008 rectangula	ar unit	w	ith four	leads			
VC-1160	.00080008	VICMO			3/4 x 1	No. 1	4	**	.50
		d processed paper t				(2000	V. Pea		10
DT-16T8	.0008	DEHMO	11/4				1	"	.35
DT-16D25	.0025	DEHNU	11/4				, ,	"	.35
DT-16D5	.005	DEHPA	15/8				11/2		.35
DT-16D7	.007	DEHKE	15/8				13/4		.35
DT-16D75	.0075	DEHLY	15/8				13/4		35
DT-16S1	.01	DEHBI	15/8		1/2		2	"	.35
DT-16S2	.02	DEYCH	15/8	x	116		3	"	.35
DT-16S3	.03	DEYDD	2	x	11		4	"	.35
DT-16S4	.04	DEYEE	2	x	$\frac{13}{16}$		5	44	.40
DT-16S5	.05	DEYFF	2		13		51/2		.45
DT-16P1	.1	DEYGG	21/2	x	7/8		81/4	66	.60

During the past 28 years, Cornell-Dubilier has produced and sold over a billion capacitors of all sizes, shapes and voltage ratings from 10 V.D.C. to 1,000,000 V.D.C. Frequently an average production of more than 500,000 units a day has been required to meet the demands of the trade. Such a remarkable record is gratifying proof of the international acceptance of C-D capacitors!





The elimination of electrical noises, commonly known as radio interference has been met with success by the judicious use and application of properly designed filter devices of both the capacitor type and combination capacitor and inductor type.

Wherever practical and possible, interference which makes radio reception difficult

and prevents full program enjoyment should be eliminated at its source. Sometimes this is not easy to accomplish. Line noises are most easily eliminated by using the correct filter at the radio receiver. Electrical noises picked up by the antenna are not so readily remedied or minimized. The source of interference must be located and a special study made of the problem. The most usual difficulties arise from the use of home electrical appliances for which the items shown herewith have been designed.

### RADIO INTERFERENCE FILTER CAPACITORS

### C-D "QUIETONE" FILTER UNITS \*

Designed to enhance the pleasure of quiet radio reproduction, the IF series of Quietone filters are efficient, inexpensive and easy to install. Intended for use in conjunction with any type of A.C. or D.C. operated radio set, both broadcast and short wave bands can be cleared of annoying interference by the use of the proper unit.

TYPE IF-4 Quietone: For use with A.C.-D.C. Midget sets. Simple to Plug in. Shipping weight ½ lb.

LIST PRICE \$1.00

TYPE IF-5 Quietone: For use with electric razors eliminating this source of bothersome noise. Shipping Weight ½ lb.

LIST PRICE \$1.00

TYPE IF-6 Quietone: For use with dozens of household appliances using motors of 1/4 H.P. or less. Provided with ground binding post. Bakelite case. Shipping Weight 1/2 lb.

LIST PRICE \$2.25

TYPE IF-7 Quietone: Heavy Duty home appliances such as washing machines, oil burners or refrigerators which cause plenty of racket can be effectively equipped with this cut-out box type to eliminate electrical interference. Designed particularly for oil burners, and rated at 5 Amperes at 110 V.A.C. Shipping Weight 6 lbs.

LIST PRICE \$7.50

TYPE IF-8 Quietone: An all-wave filter unit that can be successfully employed between the radio receiver and power line, to prevent line noises entering the set. Metal case effectively shields unit which is equipped with binding post for ground connection. For use on 110 V. A.C. or D.C., 5 Amps. maximum capacity. Shipping Weight 2 lbs.

LIST PRICE \$4.95

TYPE IF-9 Quietone: Capacitive - inductive unit for use with practically all household appliances. For use on 110 V. A.C. or D.C., will operate with any device rated up to 660 watts. Shipping Weight 11/4 lbs.

LIST PRICE \$5.50

TYPE AF-10 Quietone: Antenna Eliminator for ALL classes of radio receivers. Small bakelite case, plugs into wall outlet and does away with outdoor noisier types of aerials. Shipping Weight ½ lb.

LIST PRICE \$1.00

C-D Quietone Interference Filters can be successfully used with: Radio Receivers; Adding and Calculating Machines; Air Purifiers: Battery Chargers; Billing and Bookkeeping Machines; Compressors, Converters, Cream Separators and Counting Machines; Dental Drills, Diathermy Apparatus, Dishwashing Machines, Drills and Drink Mixers; Egg Beaters, Elevator Motors and Controls; Fans, Flashers, Food Mixers; Generators; Hair Dryers, Heating Pads; Kitchen Appliances; Motor-generators, Motors, of all types and description; Oil burners; Razors, Refrigerators; Sign Flashers, Soda Fountain Equipment; Thermostatic Controls and Traffic Signals; Vacuum Cleaners, Violet Ray Apparatus and Washing Machines. For interference elimination on Neon Signs and X-Ray equipment, we will gladly offer our engineering experience on your exact problem.

## NEW DYKANOL TRANSMITTING

#### UNIVERSAL MOUNTING, CYLINDRICAL CASE UNITS



See	page 23
	Features
(F) (F)	of
Đ	ykanol
Ca	pacitors

	Cap.	Code		List
Cat. No.	Mfd.	Word	Size	Price
		600 V. D	C	
TQ-6020	2	TYQAB	21/8x2"	\$2.25
TQ-6040	4	TYQEC	23/4×2"	3.00
		1000 V. I	C	over 11 de
TQ-10010	1	TYQID	17/8×2"	2.25
TQ-10020	2	TYQOE	21/2×2"	2.75
TQ-10040	4	TYQUF	37/8×2"	3.75
		1500 V. I	C	
TQ-15010	1	TYQGA	23/8x2"	3.00
TQ-15020	2	TYQNE	35/8x2"	3.75
		2000 V. I	C	6
TQ-20010	1	TYQJI	31/8x2"	3.75
TQ-20020	2	TYQKO	47/8×2"	4.25

Type TQ are genuine Dykanol, Fire-proof Transmitting Filter Capacitors that can be mounted vertically or inverted by means of the mounting ring supplied. Equipped with neat porcelain terminals. Real Values—never before offered to the trade.



CORNELL-DUBILIER CAPACITORS ARE MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U. S. PATENTS.

The second second		COMMUNICATION OF THE PROPERTY	AND AND ARCH			COLUMN THE PARTY		Land of Colonial I
1,572,604	1,658,768	1,713,867	1,740,131	1,759,230	1,821,055	1,842,797	1.870.949	1,940,847
1,575,044	1,661,351	1,714,662	1,740,159	1,763,554	1,823,492	1,843,541	1,870,950	1,945,108
1,575,045	1,662,548	1,715,319	1,740,177	1,767,206	1,823,502	1,845,130	1,870,961	1,959,780
1,579,168	1,671,519	1,715,560	1,742,759	1,768,416	1,824,569	1,845,138		1,962,611
1.587,942	1,666,044	1,717,701	1,743,727	1,768,430	1,824,805			1,970,776
	1,676,797	1,718,185	1,744,301	1,768,439	1,824,806	1,845,174	1,874,936	1,990,819
		1,718,278	1.744,454	1,768,440	1,824,819	1,848,215	1,891,080	2,001,282
		1,722,325	1,744,616	1,768,441	1,824,834	1,850,271		2,012,359
	1,688,478	1,722,326	1,747,915	1,768,442	1,829,891	1,856,392	1,900,093	2,031,128
1,627,493	1,688,960	1,724,884	1,750,374	1,768,449	1,830,907	1,861,006	1,907,758	2,043,532
1,628,627	1,688,961	1,726,343	1,750,393	1,785,479	1,833,392	1,861,024	1,907,859	2,048,922
1,639,597	1,691,901	1,731,652	1,754,265	1,789,263	1,833,867	1,862,275	1,907,860	2,070,435
1,639,650	1,691,911	1,731,653	1,754,268	1,808,031	1,836,707	1,862,302	1,908,962	2,075,891
1,641,513	1,699,141	1,732,224	1,756,409	1,814,533	1,840,298	1,865,640	1,920,346	2,078,772
1,646,236	1,705,242	1,735,532	1,756,512	1,816,640	1,840,776	1,867,249	1,926,842	2,088,693
1,650,983	1,707,959	1,737,752	1,757,657	1,816,641	1,841,095	1,870,797	1,934,192	2,091,920
1,652,158	1,710,412	1,738,175	1,757,659	1,817,657	1,842,374	1,870,803	1,937,010	
1,656,431	1,712,097	1,738,195	1,757,692	1,818,010	1,842,376	1,870,948	1,938,464	
	1,575,044 1,575,045 1,579,168 1,587,942 1,603,939 1,610,122 1,619,201 1,619,223 1,627,493 1,628,627 1,639,597 1,639,650 1,641,513 1,646,236 1,650,983 1,652,158	1,575,044 1,661,351 1,575,045 1,662,548 1,579,168 1,671,519 1,587,942 1,666,044 1,603,939 1,676,797 1,610,122 1,681,884 1,619,201 1,684,461 1,619,223 1,688,478 1,627,493 1,688,961 1,639,597 1,691,901 1,639,650 1,691,911 1,641,513 1,699,141 1,646,236 1,705,242 1,650,983 1,707,959 1,652,158 1,710,412	1,575,044     1,661,351     1,714,662       1,575,045     1,662,548     1,715,319       1,579,168     1,671,519     1,715,560       1,587,942     1,666,044     1,717,701       1,633,939     1,676,797     1,718,185       1,610,122     1,681,884     1,718,278       1,619,201     1,684,461     1,722,325       1,627,493     1,688,478     1,722,326       1,627,493     1,688,960     1,724,884       1,639,597     1,691,901     1,731,652       1,639,505     1,691,911     1,731,653       1,641,513     1,699,141     1,732,224       1,646,236     1,705,242     1,735,532       1,650,983     1,707,959     1,737,752       1,652,158     1,710,412     1,738,175	1,575,044       1,661,351       1,714,662       1,740,159         1,575,045       1,662,548       1,715,319       1,740,177         1,579,168       1,671,519       1,715,560       1,742,759         1,587,942       1,666,044       1,717,701       1,743,727         1,603,939       1,676,797       1,718,185       1,744,301         1,610,122       1,681,884       1,718,278       1,744,454         1,619,201       1,688,461       1,722,325       1,744,616         1,619,223       1,688,478       1,722,326       1,747,915         1,627,493       1,688,960       1,724,884       1,750,374         1,628,627       1,688,961       1,726,343       1,750,393         1,639,597       1,691,901       1,731,652       1,754,265         1,639,650       1,691,911       1,731,653       1,754,268         1,641,513       1,699,141       1,732,224       1,756,512         1,650,983       1,707,959       1,737,752       1,757,657         1,652,158       1,710,412       1,738,175       1,757,659	1,575,044       1,661,351       1,714,662       1,740,159       1,763,554         1,575,045       1,662,548       1,715,319       1,740,177       1,767,206         1,579,168       1,671,519       1,715,560       1,742,759       1,768,416         1,587,942       1,666,044       1,717,701       1,743,727       1,768,430         1,603,939       1,676,797       1,718,185       1,744,301       1,768,439         1,610,122       1,681,884       1,718,278       1,744,454       1,768,440         1,619,201       1,684,461       1,722,325       1,744,616       1,768,441         1,619,223       1,688,478       1,722,326       1,747,915       1,768,442         1,628,627       1,688,961       1,724,884       1,750,374       1,768,449         1,639,597       1,691,901       1,731,652       1,754,265       1,789,263         1,639,650       1,691,911       1,731,653       1,754,268       1,808,031         1,641,513       1,699,141       1,732,224       1,756,409       1,814,533         1,640,236       1,707,959       1,737,752       1,757,659       1,816,640         1,652,158       1,710,412       1,738,175       1,757,659       1,816,641 <td>1,575,044       1,661,351       1,714,662       1,740,159       1,763,554       1,823,492         1,575,045       1,662,548       1,715,319       1,740,177       1,767,206       1,823,502         1,579,168       1,671,519       1,715,560       1,742,759       1,768,416       1,824,569         1,587,942       1,666,044       1,717,701       1,743,727       1,768,430       1,824,805         1,603,939       1,676,797       1,718,185       1,744,301       1,768,439       1,824,806         1,610,122       1,681,884       1,718,278       1,744,454       1,768,440       1,824,819         1,619,201       1,684,461       1,722,325       1,744,616       1,768,442       1,829,891         1,627,493       1,688,960       1,724,884       1,750,374       1,768,449       1,830,907         1,628,627       1,688,961       1,726,343       1,750,393       1,785,479       1,833,392         1,639,597       1,691,901       1,731,652       1,754,265       1,789,263       1,833,867         1,631,533       1,691,911       1,731,653       1,754,268       1,808,031       1,836,707         1,641,513       1,699,141       1,732,224       1,756,512       1,816,640       1,840,298      <t< td=""><td>1,575,044       1,661,351       1,714,662       1,740,159       1,763,554       1,823,492       1,843,541         1,575,045       1,662,548       1,715,319       1,740,177       1,767,206       1,823,502       1,845,130         1,579,168       1,671,519       1,715,560       1,742,759       1,768,416       1,824,569       1,845,138         1,587,942       1,666,044       1,717,701       1,743,727       1,768,430       1,824,805       1,845,173         1,603,939       1,676,797       1,718,185       1,744,301       1,768,439       1,824,806       1,845,174         1,610,122       1,681,884       1,718,278       1,744,454       1,768,440       1,824,819       1,848,215         1,619,201       1,684,461       1,722,325       1,744,616       1,768,441       1,824,834       1,850,271         1,619,223       1,688,478       1,722,326       1,747,915       1,768,442       1,829,891       1,856,392         1,627,493       1,688,960       1,724,884       1,750,374       1,768,449       1,830,907       1,861,006         1,628,627       1,688,961       1,726,343       1,750,393       1,785,479       1,833,392       1,861,024         1,639,597       1,691,901       1,731,652</td><td>1,575,044       1,661,351       1,714,662       1,740,159       1,763,554       1,823,492       1,843,541       1,870,950         1,575,045       1,662,548       1,715,319       1,740,177       1,767,206       1,823,502       1,845,130       1,870,961         1,579,168       1,671,519       1,715,560       1,742,759       1,768,416       1,824,569       1,845,138       1,871,048         1,587,942       1,666,044       1,717,701       1,743,727       1,768,430       1,824,805       1,845,173       1,874,111         1,603,939       1,676,797       1,718,185       1,744,301       1,768,439       1,824,806       1,845,174       1,874,936         1,610,122       1,681,884       1,718,278       1,744,454       1,768,440       1,824,819       1,848,215       1,891,080         1,619,201       1,684,461       1,722,325       1,744,616       1,768,442       1,829,891       1,856,392       1,900,093         1,627,493       1,688,960       1,724,884       1,750,374       1,768,442       1,830,907       1,861,006       1,907,859         1,639,597       1,691,901       1,731,652       1,754,265       1,789,263       1,833,392       1,861,004       1,907,859         1,639,650       1,691,911</td></t<></td>	1,575,044       1,661,351       1,714,662       1,740,159       1,763,554       1,823,492         1,575,045       1,662,548       1,715,319       1,740,177       1,767,206       1,823,502         1,579,168       1,671,519       1,715,560       1,742,759       1,768,416       1,824,569         1,587,942       1,666,044       1,717,701       1,743,727       1,768,430       1,824,805         1,603,939       1,676,797       1,718,185       1,744,301       1,768,439       1,824,806         1,610,122       1,681,884       1,718,278       1,744,454       1,768,440       1,824,819         1,619,201       1,684,461       1,722,325       1,744,616       1,768,442       1,829,891         1,627,493       1,688,960       1,724,884       1,750,374       1,768,449       1,830,907         1,628,627       1,688,961       1,726,343       1,750,393       1,785,479       1,833,392         1,639,597       1,691,901       1,731,652       1,754,265       1,789,263       1,833,867         1,631,533       1,691,911       1,731,653       1,754,268       1,808,031       1,836,707         1,641,513       1,699,141       1,732,224       1,756,512       1,816,640       1,840,298 <t< td=""><td>1,575,044       1,661,351       1,714,662       1,740,159       1,763,554       1,823,492       1,843,541         1,575,045       1,662,548       1,715,319       1,740,177       1,767,206       1,823,502       1,845,130         1,579,168       1,671,519       1,715,560       1,742,759       1,768,416       1,824,569       1,845,138         1,587,942       1,666,044       1,717,701       1,743,727       1,768,430       1,824,805       1,845,173         1,603,939       1,676,797       1,718,185       1,744,301       1,768,439       1,824,806       1,845,174         1,610,122       1,681,884       1,718,278       1,744,454       1,768,440       1,824,819       1,848,215         1,619,201       1,684,461       1,722,325       1,744,616       1,768,441       1,824,834       1,850,271         1,619,223       1,688,478       1,722,326       1,747,915       1,768,442       1,829,891       1,856,392         1,627,493       1,688,960       1,724,884       1,750,374       1,768,449       1,830,907       1,861,006         1,628,627       1,688,961       1,726,343       1,750,393       1,785,479       1,833,392       1,861,024         1,639,597       1,691,901       1,731,652</td><td>1,575,044       1,661,351       1,714,662       1,740,159       1,763,554       1,823,492       1,843,541       1,870,950         1,575,045       1,662,548       1,715,319       1,740,177       1,767,206       1,823,502       1,845,130       1,870,961         1,579,168       1,671,519       1,715,560       1,742,759       1,768,416       1,824,569       1,845,138       1,871,048         1,587,942       1,666,044       1,717,701       1,743,727       1,768,430       1,824,805       1,845,173       1,874,111         1,603,939       1,676,797       1,718,185       1,744,301       1,768,439       1,824,806       1,845,174       1,874,936         1,610,122       1,681,884       1,718,278       1,744,454       1,768,440       1,824,819       1,848,215       1,891,080         1,619,201       1,684,461       1,722,325       1,744,616       1,768,442       1,829,891       1,856,392       1,900,093         1,627,493       1,688,960       1,724,884       1,750,374       1,768,442       1,830,907       1,861,006       1,907,859         1,639,597       1,691,901       1,731,652       1,754,265       1,789,263       1,833,392       1,861,004       1,907,859         1,639,650       1,691,911</td></t<>	1,575,044       1,661,351       1,714,662       1,740,159       1,763,554       1,823,492       1,843,541         1,575,045       1,662,548       1,715,319       1,740,177       1,767,206       1,823,502       1,845,130         1,579,168       1,671,519       1,715,560       1,742,759       1,768,416       1,824,569       1,845,138         1,587,942       1,666,044       1,717,701       1,743,727       1,768,430       1,824,805       1,845,173         1,603,939       1,676,797       1,718,185       1,744,301       1,768,439       1,824,806       1,845,174         1,610,122       1,681,884       1,718,278       1,744,454       1,768,440       1,824,819       1,848,215         1,619,201       1,684,461       1,722,325       1,744,616       1,768,441       1,824,834       1,850,271         1,619,223       1,688,478       1,722,326       1,747,915       1,768,442       1,829,891       1,856,392         1,627,493       1,688,960       1,724,884       1,750,374       1,768,449       1,830,907       1,861,006         1,628,627       1,688,961       1,726,343       1,750,393       1,785,479       1,833,392       1,861,024         1,639,597       1,691,901       1,731,652	1,575,044       1,661,351       1,714,662       1,740,159       1,763,554       1,823,492       1,843,541       1,870,950         1,575,045       1,662,548       1,715,319       1,740,177       1,767,206       1,823,502       1,845,130       1,870,961         1,579,168       1,671,519       1,715,560       1,742,759       1,768,416       1,824,569       1,845,138       1,871,048         1,587,942       1,666,044       1,717,701       1,743,727       1,768,430       1,824,805       1,845,173       1,874,111         1,603,939       1,676,797       1,718,185       1,744,301       1,768,439       1,824,806       1,845,174       1,874,936         1,610,122       1,681,884       1,718,278       1,744,454       1,768,440       1,824,819       1,848,215       1,891,080         1,619,201       1,684,461       1,722,325       1,744,616       1,768,442       1,829,891       1,856,392       1,900,093         1,627,493       1,688,960       1,724,884       1,750,374       1,768,442       1,830,907       1,861,006       1,907,859         1,639,597       1,691,901       1,731,652       1,754,265       1,789,263       1,833,392       1,861,004       1,907,859         1,639,650       1,691,911

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