

No. GC. 251.

WILLIAM DUBILIER
339 GARDEN ROAD
PALM BEACH, FLORIDA 33480

DUBILIER Capacitors

FEBRUARY, 1951

DUBILIER CONDENSER CO. (1925) LTD.

DUCON WORKS, VICTORIA ROAD, NORTH ACTON, LONDON, W.3, ENGLAND

Telephones: ACOrn 2241 (5 lines) Telegrams: Hivoltcon Wesphone London Cables: Hivoltcon, London, Marconi International Code

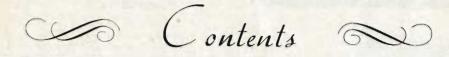
Foreword D

THIS catalogue is intended to give in abridged form details of the extensive range of Dubilier capacitors which are available through the recognised channels at Home and Overseas.

IN addition, some information is given which will be of interest to Electronic and Radio Engineers, but this will be supplemented by a new technical publication in the near future.

Meanwhile, the services of our Technical Departments are at the disposal of our customers to give them any information which they may require.

DUBILIER capacitors are available in a wide variety of designs to meet the most stringent requirements in the Television, Radio, Radar, Electronic and Industrial Engineering fields. Therefore, your enquiries will be welcomed and receive immediate and expert attention.

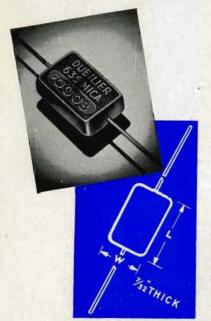


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MOULDED MICA CAPACITORS

STACKED FOIL



The well-known advantages of the Dubilier moulded mica construction have been enhanced by further development in production technique so that all the generally required capacitance values and voltage ratings are available in only three sizes.

They are wax impregnated and coated, assuring a complete hermetic seal and forming extremely robust, compact, and small mica capacitors.

TYPE 635
350 VOLTS D.C. WORKING
Capacitance Tolerance ±20%

Capacitan <mark>ce</mark> μF		Retail Price		
	Length	Width	Thickness	rrice
0-0001	11 " 16 "	7 " 16	7 "	1/2
0.0002	11 "	7 " 16 "	7 "	1/2
0.0003	11 "	7 "	7 "	1/2
0.0005	## "	7 "	7 "	1/6
0.001	11 "	Ĩ6 "	7 "	1/9

20 SWG Wire terminals 12" long.

TYPE 672 350 VOLTS D.C., WORKING.

Capacitance Tolerance + 20%

C		-		
Capacitance - μF	Length	Width	Thickness	Retail Price
0.002	53 " 64	53 " 84	11"	2/3
0.003	53 " 64	53 ″ 64	11 "	2/6
0.004	53 ″ 64	53 " 64	11"	3/-
0.005	33 " 64	53 " 64	11 "	3/-
0.006	53 " 64	53 " 64	11 "	3/-
0.01	53 " 64	53 " 64	11 "	4/6

20 SWG Wire terminals 13" long

MOULDED MICA CAPACITORS

TYPE 680 750 volts D.C. working Capacitance Tolerance ±20%

Capacitance		Retail		
μ.F	Length	Width	Thickness	Price
0·005 0·006 0·007	9 " 9 " 16 " 9 "	11 " 32 11 " 13 "	16 "	6/- 6/6 6/6
0·008 0·01 *0·02	9 " 16 " 9 "	11 " 32 " 11 "	15 "	6/6 6/6

* 350 volts D.C. working 1000 volts D.C. Test.

TYPE 680 2000 volts D.C. working Capacitance Tolerance ±20%

Capacitance		Dimensions		Retail
μF	Length	Width	Thickness	Price
0.0001	1 9 "	111"	ħ."	4/6
0.0002	1 9 "	111"	3 "	5/-
0.0003	1 % "	11 "	5 "	5/6
0.0005	14"	111"	16 3."	6/-
0.001	1 9 "	11"	16	6/6
0.002	9."	111"	16	7/
0.0025	9."	111"	16	7/6

SILVERED MICA

These capacitors consist of one or more carefully selected and processed mica sheets, silvered by a new technique to form the electrodes, and to which suitable terminals are bonded. They are moulded in a special phenolic resin compound of natural colour with red fleck, wax impregnated and coated to provide a complete hermetic seal.

TYPE S635 350 V. D.C. WORKING

Capacitance	D	imension	s	Retail Price					
pF	Length	Width	Thick- ness	* ±20%	* ±10%	±5%	±2%		
5 to 100 101 to 200 201 to 300 301 to 500 501 to 1500	11 " 16 " 16 " 16 " 11 "	76 " " " " " " " " " " " " " " " " " " "	72 " 32 " 32 " 32 " 32 " 32 "	1/4 1/4 1/4 1/4	1/6 1/6 1/6 1/6 1/6	1/8 1/8 1/8 1/8	2/- 2/- 2/- 2/-		

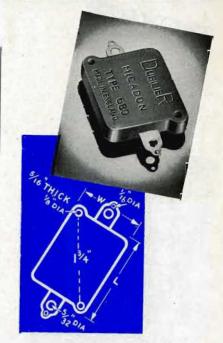
20 SWG. Wire terminals 14" long. * Or 2pF whichever is the greater.

Power Factor Maximum Power Factor ... 0.001 Frequency of Measurement 1 Ms/s

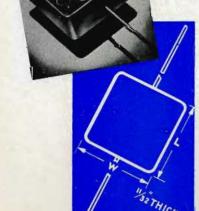
Temperature Coefficient Less than 120 parts per million per °C

A.C. Loading. Owing to the constructional limitations of the silvered mica capacitors it is recommended that the Stacked Foil, Moulded Mica types be used where the A.C. loading is not negligible.









DUBILIERCAPACITORS

2 BA

MOULDED CASE

TRANSMITTING MICA DIELECTRIC CAPACITORS

Mica dielectric capacitors have found universal application in most transmitting circuits, on account of the good dielectric properties of the best mica.

Pioneers in the design and manufacture of mica capacitors

Pioneers in the design and manufacture of mica capacitors of all kinds—from the largest in the world to the smallest—Dubilier have perfected a manufacturing technique, born of many years' practical experience, which produces capacitors with high Q, low power factor, high insulation resistance and stability over a wide range of operating frequencies and temperatures.

TRANSMITTING MICA CAPACITORS IN MOULDED CONTAINERS SOLID FILLED

Two popular and convenient transmitting capacitors for use in small transmitters and similar electronic apparatus are the types 780 and 1059. They comprise skilfully clamped mica dielectric capacitor units, mounted in moulded phenolic resin containers, solid filled and sealed with high melting point compound and having substantial screw terminals.

	e Reference	780
Maximur		3.3
,,,	RMS, Current	5.0 Amperes
,,	RMS. Volts	1800
,,	Peak Volts (A.C. and D	
	D.C. Test Volts	12000
Normal	Capacitance tolerance 🛨	10% or ±5%.
Maximum	Maximum	Maximum
Capacitance	D.C. Voltage	A.C. Voltage
0·05 μF	1.0 kV.	0.3 kV.
0.01 ,,	2.0 ,,	0.6 ,,
0.005 ,,	3.0 ,,	0.9 ,,
0.0025 ,,	4.0 ,,	1.2 ,,
0.0015 ,,	4.5 ,,	1.5 "
0.00125 ,,	6.0 ,,	1.8 ,,
Catalogu	e Reference	1059
	n Loading	3·5 kVA
	RMS current	5.0 Ampere
,,	RMS Volts	3,000
"	Peak Volts (A.C. and D	
,,	D.C. Test Volts	24,000
Maumal		
	Capacitance tolerance ±	
Maximum	Maximum	Maximum
Capacitance	D.C. Volts. Wkg.	A.C. Volts Wkg.
$0.5 \mu F$	1 ⋅ 0 kV.	0.3 kV. RMS.
0.125 ,,	2.0 ,,	0.6 ,,
0.05 ,,	3.0 ,,	0.9 ,,
0.03 ,,	4.0 ,,	1.2 ,,
0.02 ,,	5.0 ,,	1.5 ,,
0.10 ,,	6.0 ,,	1.8 ,,
0.008 ,,	7.0 ,,	2.1 ,,
0.006 ,,	8.0 ,,	2.4 ,,
0.005 ,,	9.0 ,,	2.7 ,,
0.004 ,,	10.0 ,,	3.0 ,,
0.003 ,,	11.0 ,,	3.0 ,,

Prices are available upon application

TRANSMITTING MICA DIELECTRIC CAPACITORS

DUBILIERCAPACITORS

IN PORCELAIN POTS SOLID FILLED

The types 1923 to 1953 have similar clamped and processed capacitor units mounted in substantial cylindrical porcelain pots, solid filled and sealed with high melting point compound and having large surface area contact terminals.

Max. kV	gue Ref. A. Loading 1.S. Amps.	1923 40 30		1933 25 20		1943 15 12		1953 5 10	
Max. D.C. kV. Wkg.	Max. A.C. RMS kV.	Maximui Capacitan		Maximi Capacita		Maxim Capacita		Maximi Capacita	
1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 11.0 11.0 11.0 11.0 12.0 13.0 14.0 20.0 22.0 25.0 35.0 40.0 45.0	0·3 0·6 0·9 1·2 1·5 1·8 2·4 2·7 3·0 3·6 3·9 4·2 5·5 4·6 6·6 7·5 9·0 11·0 12·0 13·0	0 · 9 0 · 1 0 · 125 0 · 1 0 · 07 0 · 05 0 · 04 0 · 032 0 · 023 0 · 023 0 · 01 0 · 015 0 · 01 0 · 001 0 · 005 0 · 001 0 · 001 0 · 001 0 · 005 0 · 001 0 · 003 0 · 003 0 · 003 0 · 001 0 · 001 0 · 003 0 · 0	«F	1.0 0.25 0.1 0.06 0.04 0.028 0.015 0.015 0.018 0.007 0.006 0.005 0.004 0.003 0.002 0.001 0.001 0.001	5 ,,	0·25 0·04 0·025 0·015 0·010 0·006 0·005 0·0014 0·0012 0·0016 0·0005 0·0003 0·0003 0·0003	5 ,,	0·03 0·008 0·001 0·001 0·0006 0·0003 0·0002 0·0002 0·0001 0·0001	5 ,,

Capacitance Tolerance Normal: +10%. Close +5%.

T S	2 32 "	l″ ¾″ Whit.	3″ 3″ Whit.	र्डे" Whit.
н	10%"土井"	5 16" + 16"	3号"生長"	2½"± ¼"
D	5 13 " dia.	3¾″ dia.	2¾" dia.	23" dia.
Drg. Ref.	1923	1933	1943	1953

Prices are available upon application





MITROGOL

NITROGOL CAPACITORS

FULLY TROPICAL

Resulting from an intensive investigation to comply with the demands for paper capacitors to withstand arduous conditions of vibration, humidity, diversity of temperature and atmospheric pressure in widely different parts of the world, these Nitrogol Capacitors were developed.

Skilfully designed elements submitted to a special Dubilier process, are assembled in robust containers suitable for their required application and they can be mounted in several ways. The terminals are moulded phenolic resin, silicone rubber sealed, or may be ceramic, solder sealed.

350 VOLTS D.C. WORKING AT 71°C. Capacitance Tolerance $\pm 20\%$

Capa-	Dimensions								
citance μF	A	В	С	E	F	Н	Fig. No.	Retail Price	
2	2 76 "	15"	11"	3 1 "	21"	3"	4 or 5	13/6	
4	2 7 "	28"	21"	3 1 "	3″	3"	4 or 5	17/6	
8	4 % "	17"	17"	51"	2½″	3"	$\begin{cases} 4 \text{ or } 5 \\ 6 \text{ or } 7 \end{cases}$	22/6	
12	4 9 "	25"	15"	51"	3‡"	3"	4 or 5	25/-	

750 VOLTS D.C. WORKING AT 71°C. Capacitance Tolerance ±20%

Capa-			Di	mensio	ns			D '1
citance μF A	Α	В	С	E	F	Н	Fig. No.	Retail Price
1	2 7 "	2"	3"	3 1 "	25"	3"	4 or 5	13/6
2	2 7 "	17.	17"	3 1 "	25"	3"	4 or 5	17/6
4	4 % "	17"	17"	51."	21″	3"	{4 or 5 {6 or 7	22/-
8	4 9 "	34"	15"	51"	33"	3"	4 or 5	32/-





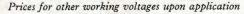
1250 VOLTS D.C. WORKING AT 71°C. Capacitance Tolerance ±20%

Capa-	Dimensions									
citance μF	Α	В	С	E	F	Н	Fig. No.	Retail Price		
0.1	2 7 "	13″	3 " 4	3 1 "	23"	3 " 4	4 or 5	12/6		
0.25	2 7 "	2"	3"	3 1 "	25"	3"	4 or 5	13/6		
0.5	2 7 "	21"	11"	3 1 "	23"	3"	4 or 5	14/6		
1	2 7 "	17"	21"	3 1 "	23"	3"	6 or 7	17/-		
2	4 9 "	17"	17"	51"	21/	3"	6 or 7	22/6		
4	4 % "	33"	25"	51"	4"	11"	4 or 5	35/-		
8	4 9 "	37"	51"	51"	54"	13"	6 or 7	60/-		



1500 VOLTS D.C. WORKING AT 71°C. Capacitance Tolerance $\pm 20\%$

Capa-			Di	mensio	ns			Retail
citance μF	Α	В	С	E	F	Н	Fig. No.	Price
0 · 1	2 7 "	13"	3"	3 1 "	23"	3"	4 or 5	13/6
0.25	276"	2″	3"	3 18"	25"	3"	4 or 5	14/6
0.5	2 76 "	17"	17."	3 16"	21/	3"	{4 or 5 6 or 7	15/6
1	2 76 "	23"	21"	3 1 "	3″	3"	4 or 5	19/6
2	4 9 "	2§"	15"	51"	31″	3"	4 or 5	23/6
4	4 3 "	33"	25"	51"	4"	11"	4 or 5	36/6
8	4 9 "	37	51"	51"	53"	13"	6 or 7	61/6





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NITROGOL CAPACITORS

FULLY TROPICAL SHALLOW DRAWN STEEL CONTAINER TYPES

A special form of Nitrogol Capacitors is available for applications where head-room is limited or for shallow under-chassis mounting.

These capacitors are in shallow drawn containers, and the moulded phenolic resin terminals, silicone rubber sealed, are mounted on the side,

400 VOLTS D.C. WORKING AT 71°C. Capacitance Tolerance ±20%

Consider	Dimensions								
Capacitance µF	w	L	н	С	D	E	Box No.	Retai Price	
0 · 25	in. 1.812	in. 1.000	in. 0·750	in. 2·187	in. 2·562	in. 0·187	2	12/-	
0.1+0.1+0.1		1 · 250			.,	.,	3	14/~	
0.5	1.812	1.250	0.750	2.187	2.562	0 · 187	3	13/6	
0 · 25 + 0 · 25		.,		-,,	,,	٠,	3	14/6	
0.25 + 0.25 + 0.25	2.000	1.750	0.875	2 · 375	2.750	0.187	4	18/6	
la l			,,			.,	4	17/-	
0.5 0.5			.,		,,	.,	4	17/-	
0.5+0.5+0.5	2.000	2.000	1 · 125	2.375	2.750	0.187	5	22/-	
2	.,		,,	1.	,,		5	22/6	
L+1	***		,,		.,	,,	5	23/-	

800 VOLTS D.C. WORKING at 71°C. Capacitance Tolerance ±20%

Constitution	Dimensions							
Capacitance µF	w	Ł	н	С	D	E	Box No.	Retail Price
0.05+0.05+0.05	in. 1·812	in. 1 · 000	in. 0·750	in. 2·187	in. 2·562	in. 0·187	2.	14/6
0-1-0-1	,,						2	12/6
0.25	1.812	1 - 250	0.750	2 · 187	2.562	0-187	3	13/-
0.1+0.1+0.1			,,	,,		.,	3	16/-
0.5	2.000	1.750	0.875	2 · 375	2.750	0 · 187	4	15/6
0.25+0.25							4	16/-
0 · 25 + 0 · 25 + 0 · 25	2.000	2.000	1 - 125	2 · 375	2.750	0 · 187	5	21/-
1				,,			5	18/6
0.5 4 0.5	100			.,	,,		5	18/6

NITROGOL CAPACITORS



SHALLOW DRAWN STEEL CONTAINER TYPES

1000 VOLTS D.C. WORKING AT 71°C. Capacitance Tolerance ±20%

Capacitance	Dimensions in Inches								
μF	w	L	Н	С	D	E	Box No.	Retai Price	
0.05	1.812″	1.000″	0.750″	2 · 187"	2 · 562"	0 · 187″	2	10/6	
0.1	,,	,,	,,	,,	,,	,,	2	15/-	
0.05+0.05	,,	,,	,,	,,	,,	"	2	12/-	
0.05+0.05+0.05	1.812"	1 · 250"	0.750″	2 · 187"	2.562"	0.187"	3	14/-	
0.1+0.1	2.000″	1 · 750"	0.875″	2.375"	2.750"	,,	4	13/-	
0.25	2.000"	2.000"	1 · 125"	2.375"	2.750"	0.187"	5	14/-	

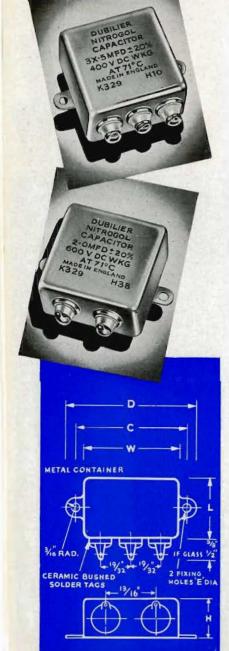
MINIATURE NITROGOL CAPACITORS 600 VOLTS D.C. WORKING AT 71°C.

Capacitance Tolerance ±20%

Capacitance	Dimensions in Inches								
#F	w	L	Н	С	D	E	Box No.	Retai Price	
0.25	1.812"	1.000″	0.750"	2 · 187"	2.562"	0 · 187"	2	14/-	
0.5	2.000"	1.750"	0.875″	2 · 375"	2.750"	0 · 187"	4	16/-	
0.25+0.25	,,	,,	,,	,,	,,	"	4	18/-	
$0 \cdot 25 + 0 \cdot 25 + 0 \cdot 25$	2.000"	1 · 750″	0.875"	2.375"	2.750"	0.187"	4	21/-	
1	,,	,,	,,	,,	,,	,,	4	21/-	
0.1+0.1+0.1	1.812"	1 · 250"	0.750"	2 · 187"	2 · 562"	0.187"	3	17/-	

The maximum number of insulated terminals which normally can be provided is 3. Therefore, all units containing three capacitances have their common connection on the metal case. Units comprising two capacitances can be supplied either with two or three insulated terminals, in the former, the case is the common connection.

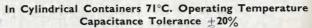
Special arrangements and ratings in these containers can be supplied to order for large quantities.





NITROGOL HIGH VOLTAGE TELEVISION CAPACITORS

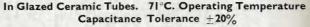
A range of Nitrogol Capacitors for Television and other small ripple high-tension applications are available in cylindrical forms. They are assembled in solid drawn cylindrical aluminium containers forming one terminal and with a gasket sealed moulded bakelite high-tension terminal. These capacitors are furnished with detachable



clamp fixing feet for vertical or inverted mounting.

Capa-	D.C.	Rating		D	imensi	ons		Retail Price
citance μF	Wkg.	Test	Α	В	D	E	F	Frice
0.01	8 kV. 8 ,,	16 kV.	3 <u>\$</u> "	1½"	2 ½1″ ,,	5½″	31 " 32 "	10/6
0·05 0·1	8 ,,	16 ,,	51"	"	"	65"	,,	18/6
0.2	5 ,,	10 ,,	,,	,,	,,	,,	,,	24/-

Where the C.R.T. D.C. is derived from a H.F. oscillator or from a Fly-back voltage, the smaller capacitance required enables the capacitor to be of smaller physical size. These capacitors have been specially designed for this purpose and comprise a Nitrogol processed tubular paper dielectric element assembled in a glazed ceramic tube, to the platinised ends of which metal end cap terminals are soldered providing hermetic sealing.



C	D.C. I	Rating	Caula	Retail
Capacitance – μF	Wkg.	Test	Style	Price
0.025	2 kV.	4 kV.	IA	5/- 5/-
0.01	4 ,,	8 ,,	,,	5/-
0·005 0·0025	7 "	10 ,,	,,	7/6 7/6
0.002	8 ,,	16 ,,	,,	7/6
0.0015	9 ,,	18 ,,	,,	7/6
0.001	10 ,,	20 ,,	. ,,	7/6



DUBILIERCAPACITORS

The phenomenal success of Dubilier Drillitic Capacitors has established them as the highest development in Electrolytic Capacitor Engineering.

They have small D.C. leakage and equivalent series resistance, high breakdown voltage and improved temperature characteristics and radio and audio frequency impedance.

These superior electrical characteristics co-ordinated to give a well balanced function and long life expectancy, together with the considerable reduction in physical size contribute to their wide popularity and success in all applications.

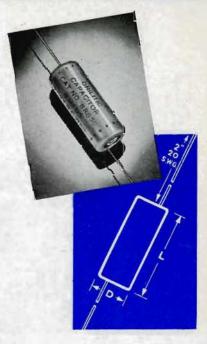
"Drillitic" capacitors are designed to operate for extended periods in an ambient temperature of 60°C, without detrimental change in their electrical characteristics. Where the ambient temperature is likely to exceed 60°C, the use of a capacitor having a voltage rating of 59 volts greater than would be employed normally, is recommended.

The BR. Drilitic capacitors are assembled and sealed in seamless drawn aluminium containers, which are always negative, and they are covered with an insulating tube and have tinned wire terminals at both ends. The construction ensures that the electrolyte cannot contact any other than high purity film-forming metal.

TYPE BR

Cat. Ref.	Cap. µF	Max. D.C. Wkg.	Size	e Ins.	Max. Ripple Current	Retail
Out. New	σ., μ.,	Volts	D	Ļ	m.A at 100 c/s	Price
BR.501 BR.1001 BR.102A BR.252A BR.252A BR.1002A BR.1005 BR.255 BR.255 BR.3015 BR.3015 BR.3015 BR.3015 BR.815 BR.825 BR.1625 BR.425 BR.425 BR.425 BR.425 BR.425 BR.425 BR.425 BR.435 BR.435 BR.435 BR.435 BR.435 BR.450 BR.4	50 100 10 25 50 100 10 25 50 4 8 16 30 50 80 4 8 16 40 4 8 16 32 1 2 4 8 16 32 4 8 8 16 8 16 8 16 8 16 8 16 8 16 8 16	Volts 12 12 25 25 25 25 50 50 150 150 150 150 150 150 250 250 250 250 250 350 350 350 350 350 350 350 350 350 3	O established ordered and a this section is a section of a section of the section	1 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2		2/9 2/9 2/9 2/6 2/9 3/6 2/9 3/6 2/9 3/1 4/6 5/6 3/6 4/6 3/6 4/6 3/6 4/6 3/6 4/6
BR.2050 BR.3250	20 32	500 500	1	3	120 130	6/6 9/6

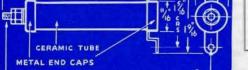
The insulating sleeve of BR. types adds $\frac{1}{16}''$ to the diameter and $\frac{1}{4}''$ to the length.



DRILITIC CAPACITORS IN DISPLAY CARTONS

Dubilier Drilitic Capacitors Type BR are available to the trade in attractive coloured display cartons in the following packs at no extra charge.

		Volts	Per Car- ton	Price per capacitor
BR.450	$4\mu F$.	500	12	3/6
BR.850	8μF.	500	12	4/-
BR.1650.	16μF.	500	6	6/-
BR.3250.	32μF.	500	6	9/6
BR.815.	8μF.	150	12	2/9
BR.505.	50μF.	50	12	3/6
BR.252A.	$25\mu F.$	25	12	2/6
BR.501.	50μF	12	12	2/6



4 BA THREAD

2 FIXING HOLES & DIA.



-D-

4 BA.CLEAR

DRILITIC **ELECTROLYTIC CAPACITORS**

The C.T. Drilitic capacitors are assembled and sealed in seamless drawn aluminium containers, which are always negative, and with tinned solder tags at one end. They are available in single and dual capacitance arrangements and the construction ensures that the electrolyte cannot contact any other than high purity film-forming metal.

TYPE CT

100		Max. D.C.	Size	Ins.	Max. Ripple	
Cat. Ref.	Cap. µF	Wkg. Volts	D	L	Current m.A. at 100 c/s	Retail Price
CT1635	16	350	1	2	130	4/9
CTP161635*	16-16	350–350	1	21/8	130-130†	7/6
CT323235	32–32	350–350	13	2	140-140†	11/6
CT850	8	500	1	2	100	4/6
CT1650	16	500	T	2	110	6/6
CT3250	32	500	18	2	130	10/-
CTP8450*	8-4	500-500	1	21/8	100-70†	6/6
CT8850	8–8	500-500	13	2	100-100†	6/6
CT16850	16-8	500–500	13	2	110-100†	8/6
CT161650	16-16	500-500	13	2	110-110+	10/6

[†] Total maximum ripple current for both sections together must not exceed

Vertical mounting brackets are supplied with all types.

TYPE CT AND CR

Specially designed types for Television purposes. High Ripple current sections. Total ripple current for both sections must not exceed larger figure.

3.0	No.	Max. D.C.	Size	Ins.	Max. Ripple Current	Retail
Туре	Cap. μF	Wkg. Volts	D	L	m.A. at 100 c/s	Price
СТ	50-100	280–280	13	4	450	14/6
CR	50-100	350–350	13	4	425	16/6
СТ	60-100	350–350	13	4	450	17/6
CT	50	280	13	3	450	11/6
СТ	100	280	13	2	Smoothing only	12/6

Suitable mounting brackets are supplied with these items. Container negative in each instance.

DRILITIC ELECTROLYTIC CAPACITORS

EAR MOUNTING TYPES



TYPES CTE AND CRE

Catalogue	Cap.	Max. D.C.	Size	Ins.	C. 1.	Max. Ripple Current	Retail
Reference	μF	Wkg. Volts	D	L	Style	m.A. at 100 c/s	Price
CTE850 CTE850HR CTE1650 CTE1650HR CTE1250HR CTE3250 CTE8850 CTE8850HR CTE16850HR CTE16850HR CTE16850HR CTE16850HR CTE161650HR CRE44450 CRE88450 CRE88450 CRE88450 CTE1635HR CTE1635HR CTE1635HR CTE1635HR CTE1635HR CTE1635HR CTE1635HR CTE1635HR CTE1635HR CTE32335HR CTE32335HR CTE32335HR CTE3231635HR CTE3231635HR CTE3231635HR CTE3231635HR CTE3231635HR	8 8 16 32 32 32 8-4 8-8 16-8 16-16 16-16-16-8 24-16-18 16-32 32-16-32 32-16-32 32-16-32 32	500 500 500 500 500 500 500-500 500-500 500-500 500-500 500-500 500-500-500 500-500-500 500-500-500 350 350 350 350 350	ाक्ष नक्षक नक्षक क्षेत्र कर्मक क्षेत्र कर्मक क्षेत्र कर्मक क्षेत्र कर्मक क्षेत्र क	22223322222222222222222222	AAABABABBBBBBBAAABBBB	100 † 130 † 130 *100-70 *100-100 † *110-100 *110-100-70 *100-100-70 *110-110-100 *125-110-100 † 130 † † † † † † † † † † † † † † † † † † †	4/66 5/66 7/66 9/66 10/66 6/66 6/66 11/66 10/66 11/66 4/ 7/66 8/66 9/66

† Denotes "High Ripple Current Construction."

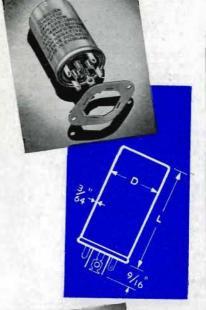
The total maximum ripple current for all sections must not exceed the larger

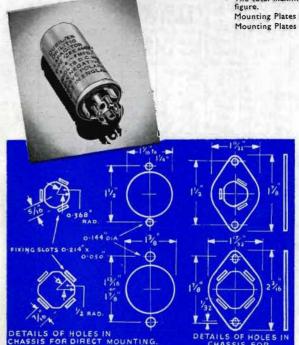
Mounting Plates in Bakelite for isolating capacitor from chassis ... 3d. each Mounting Plates in Steel for replacement unit 2d. each

> To enable the maximum advantage to be taken of the superior electrical characteristics and reduced physical dimensions of Dubilier Drilitic Capacitors, a new method of mounting has been evolved to provide a more rapid, efficient and space saving means of fixing the Capacitors.

With this Ear Mounting method no loose parts, clamp bands, fixing screws, nuts or rivets are required. A slight twist of the mounting ears and the Capacitor is rigidly fixed, and the diameter of the Capacitor represents the maximum chassis space occupied.

Bakelite isolating plates are supplied where the Capacitor is required to be insulated from the chassis and metal mounting plates are available with identical centres to the older types for general replacement purposes. Ear Mounting Drilitic Capacitors are available in two types CTE and CRE in single, dual and triple capacitance arrangements, in normal and high-ripple (HR) constructions.





MOUNTING PLATE.

BAKELITE MOUNTING PLATE 16 THICK



[14]

^{*} Double ended container.



METALLISED PAPER CAPACITORS





A useful technique permitting paper dielectric capacitors extremely compact, small in size and light in weight is adopted for these capacitors.

They comprise an extended electrode capacitor element, with a single thickness separator of dielectric tissue, metallised by a special process.

They are provided with axial tinned wire terminals soldered to the ends of the electrodes and assembled in an insulating sleeve.

Type 410, for use in normal atmospheric conditions, are subjected to a drying and impregnation process in high vacuum and finally coated with a high melting-point water repellant wax.

Type 418, has the impregnated and sleeved element mounted in a metal tube. It is hermetically sealed at the ends with neopreme faced laminated bakelite discs and the terminal wires project through centrally placed eyelets to which they are soldered.

Dimensional t	olerano	e on				 			-0 + 1''
_ 11	10		diamete	r		 			# 40
Capacitance	1.9					 		***	±25%
Insulation Res	istance			100	Ω F				15°-25°C
Power Factor						0.05 at 1	.000 c/s	and	15°-25°C

TYPE 410—Wax Protected Capacitance Tolerance ±25%

Capa-	150 V.DC. Wkg. at 71°C.		250 \	250 V.DC. Wkg. at 71°C.			350 V.DC. Wkg. at 71°C.	
citance μF	Size D. L.	Retail Price	D.	L.	Retail Price	D.	L.	Retail Price
0·05 0·1 0·25 0·5	$\begin{array}{c} - \\ \frac{5}{16}" \times \frac{5}{8}" \\ \frac{5}{16}" \times \frac{1}{8}" \\ \frac{7}{16}" \times \frac{1}{8}" \\ \frac{1}{2}" \times \frac{1}{8}" \\ \frac{1}{16}" \times \frac{1}{8}" \end{array}$	1/6 2/- 2/6 3/3 5/-	音""> 音""> 音""> 音"">	5858 1 1 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8	1/6 1/6 2/3 2/9 3/9 6/-	7 " 16 " 16 " 16 " 16 " 16 " 16 " 16 " 1	< 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1/6 1/6 2/6 3/3 4/6

22 SWG. Wire terminals 12" long.

TYPE 418—Metal Cased Capacitance Tolerance ±25%

Capa-	150 V.DC. Wkg.		250 V.DC. Wkg.		350 V.DC. Wkg.	
	at 71°C.		at 71°C.		at 71°C.	
citance	Size	Retail	Size	Retail	Size	Retail
μF	D. L.	Price	D. L.	Price	D. L.	Price
0·05 0·1 0·25 0·5 1	38" × 78" ½" × 78" ½" × 13" ½" × 13" ½" × 13" 3" × 12"	2/- 2/6 3/- 3/9 5/6	3" × 7" ½" × 78" ½" × 138" ½" × 138" ½" × 138" ¾" × 138" ¾" × 23"	2/- 2/- 2/9 3/3 4/3 6/6	1"× 7" 12"× 13" 12"× 13" 13"× 13" 15"× 13" 15"× 13" 15"× 13"	2/- 2/- 3/- 3/9 5/-

22 SWG. Wire terminals 14" long.

MINIATURE METALLISED PAPER CAPACITORS

DUBILIERCAPACITORS

This Dubilier development in miniaturisation consists of a Metallised Paper Capacitor unit of special construction enabling an extremely compact and small size to be achieved.

The capacitors are cylindrical in shape with axially projecting tinned wire terminals. The capacitor elements are moulded in a special phenolic resin of high insulation providing a rugged casing of great homogeneity. They have a very high insulation resistance, good capacitance stability, low effective inductance and are impervious to moisture.

They are capable of being operated over the exceptionally wide temperature range of -40° C. to $+70^{\circ}$ C. and are colour coded by the standard colour code bands giving the capacitance in micro-microfarads.

Possessing the familiar self-healing properties of metallised paper capacitors their excellent characteristics are maintained in the most arduous conditions of use.



DUBILIER MINIATURE METALLISED PAPER

CAPACITORS

TYPE 400

Length 12 mm. (0.475°). Diameter 5 mm. (0.2°

Up to 0.003µF. at 350V D.C. Wkg.

CAPACITANCE TANGE

Over 0.003µF. at 350V D.C. Wkg.

CAPACITANCE TOLERANCE

ADMITTANCE TOLERANCE

CAPACITANCE STABILITY

INDUCTANCE

ESTABLIST Over the temperature range.

EFFECTIVE OPERATIVE FREQUENCY RANGE

150 0/5 to 100 Mc/s approximately.

TEMPERATURE RANGE

INSULATION RESISTANCE

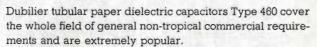
Better than 50,000 Megohms for all capacitance values.

Prices available to bona-fide manufacturers upon application



TUBULAR PAPER CAPACITORS

(GENERAL PURPOSE)



Capacitor elements of extended foil construction with folded back connections to special metal end-caps which have integral tinned wire terminals, are assembled in insulating sleeves. The ends of the sleeves are spun over into the metal end-caps and they are then subjected to the Dubilier vacuum drying and impregnation process and double wax coated.

TYPE 460

	- 1	D.C.	Dimen	sions	
Capa- citance μ F	Tolerance	Working - Volts	L*	D	- Retail Price
0.001	±25%	1000	13"	3"	1/2
0.002	±25%	1000	13"	3"	1/2
0.005	±25%	1000	13"	3"	1/2
0.01	±25%	1000	13"	3"	1/2
0.02	±20%	750	13"	3"	1/2
0.05	±20%	350	13"	3"	1/2
0.05	±20%	500	13"	1"	1/2
0.1	±20%	350	13"	1"	1/2
0.1	±20%	500	1 15"	1"	1/4
0.1	±20%	1000	2 3 "	3"	1/9
0.25	±20%	350	1 15"	3"	1/6
0.25	± 20%	500	2 3 "	3"	1/9
0.5	±20%	350	2 3 "	3"	2/-
0.5	±20%	500	2 3 "	1"	2/6
1.0	±20%	350	2 3 "	1"	3/-

Capacitors rated at 500 V, D.C. Wkg, or more may be used at not exceeding 250 V, RMS, at frequencies not exceeding 100 c/s.

TUBULAR PAPER CAPACITORS



TYPE 419

The Type 419 tubular paper dielectric capacitor is wax impregnated and sealed and is of small physical dimensions. Extended foil construction is employed, which, together with the short length of the capacitor, makes it particularly suitable for use as a high frequency by-pass device for television and similar applications.

Capacitance range: $0.001\,\mu\text{F}$. to $0.01\,\mu\text{F}$. Capacitance tolerance: \pm 20%. Dimensions: Length $\frac{5}{8}''$, dia. $\frac{5}{16}''$. Working voltage: 350 volts D.C. Test voltage: 1,000 volts D.C.

Prices available to bona-fide manufacturers upon application



TYPE 460B FOR A.C. WORKING

These Capacitors are similar in general construction to the type 460 but the elements are of the sub-divided dielectric pattern to limit the A.C. voltage between electrodes. They are designed to withstand the peculiar wave forms and voltage peaks encountered in vibrator power-packs and other such apparatus.

Capa-	Name of Street	Working	Dimer	Retail	
citance μF	Tolerance	Volts A.C.	L	D	Price
0.01	± 25%	800	13"	1/2	2/3
0.006	±25%	800	13"	1/2"	2/-
0.05	±20%	600	2 3 "	3"	2/3
0.02	±20%	600	1 15."	1/2"	2/-
0.05	± 20%	300	18"	1"	1/6
0.01	±25%	300	14"	3"	1/6
0.005	±25%	300	11"	3"	1/6



On mixed loading the peak of A.C. should not exceed 10% of the applied D.C. Voltage for any item in the range.

^{*} Dimensional tolerance on length +0-18"

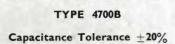


TUBULAR PAPER CAPACITORS

(TROPICAL)

Type 4700B are metal cased tubular paper dielectric capacitors comprising a capacitor element of extended foil construction suitably processed and impregnated.

The element is assembled and hermetically sealed in a seamless metal tube by means of high grade bakelite backed synthetic rubber discs. Tinned wires are soldered to eyelets on the discs to provide convenient connectors.



Capa-		y Voltage .C.	Dimensions		Cata-	Retail
citance μF	at 71°C.	at 85°C.	L	D	logue Ref.	Price
0.001	1000	1000	15"	3"	4701B	1/10
0.002	1000	1000	15"	3"	4701B	1/10
0.005	1000	1000	15"	1/2	4702B	1/10
0.01	1000	1000	15"	1"	4702B	1/10
0.02	750	750	15"	1"	4702B	1/10
0.05	500	450	15"	1"	4702B	2/1
0.1	350	250	15"	1"	4702B	2/1
0.1	500	450	21/8	1"	4703B	2/2
0.1	1000	750	28"	3"	4705B	3/-
0.25	350	250	21"	3"	4704B	2/8
0.25	500	450	23"	3"	4705B	3/-
0.5	350	250	23"	3"	4705B	3/2
0.5	500	450	21"	1"	4706B	4/-
1.0	350	250	23"	1"	4707B	4/6

Capacitors are also available for 100°C. operation. Particulars and prices upon application.

TUBULAR PAPER **CAPACITORS**

(MINIATURE)

"MINICAPS"

Assembled in wax impregnated insulation sleeves the construction of these Capacitors provides a balance between minimum size, weight, electrical performance and mechanical strength. It also ensures maintenance of adequate working insulation resistance provided their use is limited to non-tropical conditions.

CAPACITANCE TOLERANCE ± 20%

Cap.	D.C.	Volts	Size		
μF	Wkg.	Test	L	D	Price Each
0·001 0·002 0·003 0·005 0·01 0·001 0·002 0·003 0·005 0·01	350 350 350 350 350 500 500 500 500	1,000 1,000 1,000 1,000 1,000 1,500 1,500 1,500 1,500	0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75	0·175 0·175 0·175 0·175 0·205 0·195 0·195 0·195 0·195	1/- 1/- 1/- 1/- 1/- 1/2 1/2 1/2 1/2

METAL "MINICAPS"

Metal cased "Minicap" Capacitors were designed to meet the demands for miniature Capacitors to withstand the severest conditions of humidity, temperature and high

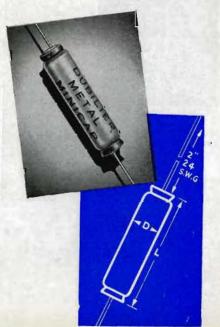
They are of the extended foil construction with solderedon co-axial wire connection and are enclosed in a metal sleeve. Insulating end discs with metal eyelets through which the connection wires pass and to which they are soldered completes the hermetic seal.

CAPACITANCE TOLERANCE ± 20%

Capacitance	D.C	. Wkg.	Volts	Dime		
μF	71°C.	85°C.	100°C.	L	D	Retail Price
0.001 0.002 0.005 0.01 0.005 0.01 0.02	500 500 500 500 350 350 350	450 450 450 450 250 250 250	350 350 350 350 200 200 200	16" 16"	0·25" 0·25" 0·25" 0·34" 0·25" 0·25" 0·34"	1/9 1/9 1/9 1/10 1/8 1/8

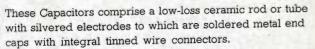








TUBULAR CERAMIC CAPACITORS



They are finished by coating with grey enamel.

Positive Temperature Coefficient +90 parts per million per degree C.

Minimum Tolerance ±0.5pF. 500V. D.C. Wkg. Max.

Сара-	Dime	nsions	Cat.	Re	tail Price	
citance pF	L	D	Ref.	± 20%	± 10%	±*2%
0.5	6 mm.	4·8mm.	CRD	2/3	2/6	3/-
1.0	6 ,,	4.8 "	CRD	2/3	2/6	3/-
1-12	11 "	4 ,,	CTD310	1/6	2/-	2/6
13-22	17 ,,	4 ,,	CTD316	1/9	2/6	3/-
23-56	28 ,,	5 ,,	CTD427	2/-	2/9	3/6
57-90	28 ,,	7 ,,	CTD627	2/6	3/3	4/-
91-170	44 ,,	7 ,,	CTD643	3/-	4/-	5/-

Negative Temperature Coefficient — 800 parts per million per degree C.

Minimum Tolerance ±0.5pF. 500V. D.C. Wkg. Max.

Capa-	Dimensions		Cat.	Retail Price			
citance pF	L	D	Ref.	± 20%	± 10%	± 2%	
1 · 5 – 5	10	4.8	CRS	2/3	2/6	3/-	
5 · 6 – 56	-11	4	CTS310	1/6	2/-	2/6	
57-110	17	4	CTS316	1/6	2/-	3/-	
111–330	28	5	CTS427	2/-	2/9	3/6	
331-500	28	7	CTS627	2/6	3/3	4/-	
501-1000	44	7	CTS643	3/-	4/-	5/-	

^{*} or \pm 0.5 pF whichever is greater.

DIODE-FILTER UNITS



CYLINDRICAL PATTERN TYPE CRC

These multiple component units which we have developed provide a practical alternative to "Printed circuits" and the "Printed components" that have recently attracted the attention of designers of radio and electronic equipment.

They possess all the advantages to the radio and electronic manufacturers that "printed" components can offer, with the additional merit of being built from well-proved capacitor and resistor elements that have stood the test of time.

The construction of these units has received intensive study in the Dubilier Laboratories and is covered by several patent applications, namely, Nos. 34197/47, 23058/48, 1873/49, 5409/49 and others pending.

The Type CRC unit provides a complete diode filter in a single compact unit from which only three connecting wires project—one input and one output at opposite ends of the cylinder, with a central wire for the earth connection. A thick water repellant wax coating is used to give adequate humidity protection.

This Unit is constructed of a tubular **ceramic dielectric** element which furnishes the two capacities C_1 C_2 , and has the resistance element housed in the interior of the tube.

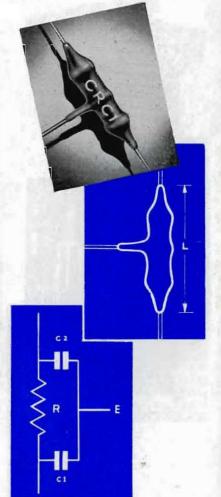
Any value of resistance can be furnished, the maximum value of C_1 and C_2 is $100~\mu\mu\text{F}$ each. Unless otherwise ordered the standard filter type CRC1 is supplied with values of:—

$$C_1 = C_2 = 100 \,\mu\mu F; \qquad R = 47000 \,\Omega$$

Dimensions of element $3/4'' \log \times 3/16''$ diameter plus the thickness of the wax coating. Normal working temperature range 0° to + 50°C.

Note.—To special order these diode filters can be supplied moulded into a hard resin casing which provides greater mechanical protection and furnishes full protection over temperature range of -40° to $+70^{\circ}$ C.

Prices available to bona-fide manufacturers upon application
[23]





CERAMIC TRIMMER CAPACITORS

The Dubilier Ceramic Trimmer Capacitor consists of a stator base of low permittivity ceramic material and a rotor of high permittivity ceramic material constituting the working dielectric and having their adjacent faces ground flat

The stator and rotor are so silvered that there is an approximately linear change of capacitance with rotation, and they are finished by coating with grey enamel.

Capacitance Tolerance. At maximum -0+50%At minimum \Rightarrow Nominal.

Test Voltage 1000V. D.C.

Capacit	ance pF	Туре	Retai
Min.	Max.	.//	Price
3.5	25.5	CVS.11	3/-
5	40	CVS.11	3/-
12	60	CVS.11	3/-

Temp. Coeff. per °C. – 550 parts per million. Power Factor (Tan δ) <20 × 10 ⁻⁴. Insulation Resistance >100,000 M Ω .

CERAMIC DIELECTRIC BY-PASS OR BUSHING CAPACITORS



For certain ultra high radio frequency circuitry positions such as decoupling in Television and for other U.H.F. applications it is essential for the impedance-frequency characteristic of the capacitors to be virtually that of a pure capacitance.

The inductance due to terminals and connections of ordinary capacitors makes them unsuitable for such applications and to meet this requirement a range of By-pass or Bushing Capacitors is available.

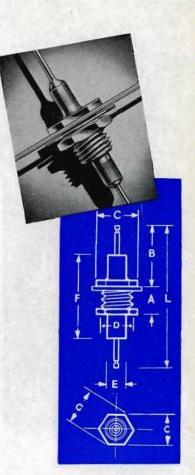
The construction consists of a threaded metal bush through which is fitted a ceramic dielectric tube with silvered inner and outer electrodes. The outer is soldered to the metal bush forming one terminal and a metal pin fitted through and projecting beyond both ends of the tube and soldered to the inner electrode provides a straight-through connection. Therefore they can be conveniently fitted through holes in the chassis or screen.

Prices available to bona-fide manufacturers upon application

MAXIMUM WORKING VOLTAGE 500V. D.C. TEST VOLTAGE 1500V. D.C.

I War		Approximate 50%	Characte & R.H. a	eristics a nd Mc/	t 15°–25°C., s.
Capacitance, pF. ± 10%	Туре	Temp. Coeff. parts per million per °C.		Factor n δ)	Permittivity
22	BPD316	90	< 10	× 10-4	16
33 47 39 56	BPD427	: :	::	,, ,, ,,	n n n
68 82	BPD627	7	11		::
100 120 150	BPD643	:		:	" "
100 120	BPS316	-800	< 20	× 10 -4	85
180 220 270 330	BPS427	" " "	., ., .,	:	" "
390 470	BPS627			:	.,
560 680 820 1000	BPS643	" "	**	:	" " "

Туре	A	В	С	D	Ε	F	G	L
BPD316 BPS316	39 "	% "	0 · 324″	I BA. (0·209")	3 mm. 0·118″	16 mm. 0·63"	3"	1 5 4
BPD427 BPS427	16"	23 "	0 · 437"	å″×26 T.P.I.	4 mm. 0·157"	27 mm. I·06"	1"	13"
BPD627 BPS627	5 " 16 "	23 " 32	0.5″	3″×26 T.P.I.	6 mm. 0·236"	27 mm. I·06"	37 " 64 "	13"
BPD643 BPS643	16 "	1 1 2 "	0.5"	3″×26 T.P.I.	6 mm. 0·236"	43 mm. I · 69"	37 " 64	28"





TRANSMITTING CERAMIC DIELECTRIC CAPACITORS

BELL-FLANGED POT TYPE

Ceramic transmitting capacitors of the bell-flanged pot type consist of a low-loss ceramic body, tubular in shape, with one end spherically closed and the other end open. An integral bell-shaped stress flange is situated on the exterior near to the open end.

Silvered internal and external surfaces form the electrodes, to which substantial connection lugs are soldered. The unsilvered surfaces are glazed and the silvered portions are normally finished with high-grade enamel.

These capacitors are for use in all forms of transmitting circuits. The types bearing suffix letters RDX are not suitable for application where any form of low frequency loading—20 kc/s or less—is to be applied. Types with the suffix DMY should be selected wherever possible, while those with suffix RDX should be used only where space and capacitance considerations preclude the use of the DMY types.

The ratings quoted should not be exceeded. Where there is a combined application of D.C. with L.F. and/or R.F. superimposed, the total peak voltage applied should not exceed the value of the quoted D.C. rating. For telephone modulation or I.C.W. conditions, the peak voltage applied should not exceed the peak value of the quoted R.M.S. plain C.W. rating.

When using types fitted with a ceramic fixing base care must be exercised to ensure that the maximum voltage to earth from the lower connection lug does not exceed 5kV.D.C. For voltages to earth in excess of this, particularly radio frequency voltages, the types shown in Figs. A, B, D and E should be selected and installed suspended from self-supporting connections.

Capacitor	All Sizes in mm.							
Туре	Fig.	L	D	d	Р	С	٧	
C226 C226 C226 C226 C226	A B C D E	90 87 90 98	48	25	60 	33 	5 to 10	
C237 C237 C237 C237 C237	A B C D E	73 70 73 81	48	25 	43 	33	5 to 10	
C232 C232 C232 C232 C232	A B C D E	59·5 56·5 59·5 67·5	48	25 	32	33	5 to 10	
C238 C238 C238	A B D	50 42 50	48	25	32	33	5 to 10	

TRANSMITTING CERAMIC DIELECTRIC CAPACITORS

DUBILIER

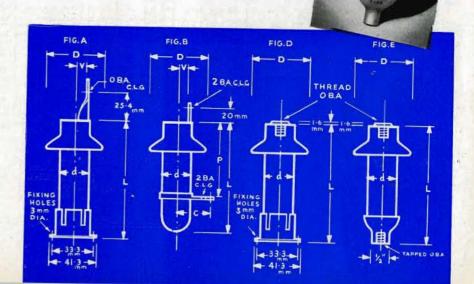
BELL-FLANGED POT TYPES

TYPES AND RATINGS.

Сара-	Capa	citance rance		Rating	Rating			Characterist 50% R.H. an	tics at	
citance, μF	Basic	Min.	D.C. kV.	H.F. kV. R.M.S.	kVA	Max. D.C. Test, kV.	Temp. Coeff. parts per million per °C.	Power Factor (Tan δ)	Per- mit- tivity	Туре
50	1.20%	±10%	10	3.5	10	20	-90	<5×10-1	16	C238DMY
75		"			15					C232DMY
100			**		20					C237DMY
125		-,,_								
150			.,		30		.,			C226DMY
200		.,	.,		.,		,,		**	*
250	"	-				15				
200	± 20%	+10%	10	0.75	2	20	600	<10×10-1	65	C238R DX
350		w			3					C232RDX
500		44		,,	4					C237RDX
650			.,	,,	5	3	.,			C226RDX
1000	/								,,	,,

Fig. A, D or E connectors should be used on capacitors rated in excess of 10kVA. Working conditions in excess of, or not covered by, the tabulated data should be the subject of special enquiry.

Prices are available upon application

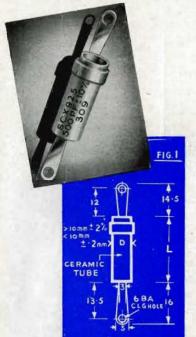


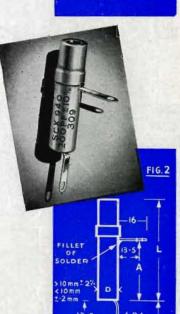




TRANSMITTING CERAMIC DIELECTRIC CAPACITORS

TUBULAR TYPE





OLDER TAGS

A range of low-power transmitting ceramic capacitors are available comprising a low-loss ceramic tube, with heavily silvered electrodes to which terminal lugs are soldered. The unit is finished with a protective coating of high-grade enamel or varnish.

The capacitors are for use in low-power transmitting circuits, but the types with prefix letters "SCX" must not be used on frequencies of less than 20 kc/s.

The ratings quoted should not be exceeded. Where there is a combined D.C. with L.F. and/or R.F. superimposed, the total peak voltage applied should not exceed the quoted D.C. rating. For telephone modulated or I.C.W. conditions, the peak voltage applied should not exceed the peak value of the quoted R.M.S. rating.

The enamel finished type is recommended for general use where excessive atmospheric moisture is not encountered.

	1	1aximun	n Ratin	gs	Ena	mel F	rotect	ted	
Сара-	Working			Test		Size mm.			
citance Range				To	Туре			1	4
pF	VA	kV. R.M.S.	kV. D.C.	kV. D.C.	No.	D.	L	Fig. No.	
							1	2	
50-250	750	0.25	2.0	5.0	SCX940	9	40	_	25
250-350	1000	,.	.,		SCX950		50	-	,,
350-400	1500				SCX955	,,	55	-	35
50-250	.,				SCX1240	,,	40	-	25
50-500	240	,,	0.5	1.5	SCX925	.,	25	-	16
500-950	480				SCX945		45	_	25
950-1200	600				SCX953		53	-	35
5-45	3000	1.0	2.0	5.0	DMY1240	12	40	-	25
10-120	1500	0.75	1.0	2.5	DMY940	9	.,,	-	-,,
120-160		0.75			DMY950		50	-	,,

Capacitance Tolerance Basic $\pm 10\%$ Intermediate $\pm 5\%$ Minimum $\pm 1\%$ or ± 1 pF, whichever is greater. Approximate Characteristics at $15^{\circ}-25^{\circ}$ C., 50% R.H. and 1 Mc/s. Parts per million. Parts per million. Temperature Coefficient per $^{\circ}$ C. Type DMY +90 Type SCX -800 Power Factor (Tan δ) ..., $< 15 \times 10^{-1}$ Permittivity ..., = 16 ... = 85

Prices are available upon application

TRANSMITTING CERAMIC DIELECTRIC CAPACITORS



TRANSMITTING BUSHING TYPE CERAMIC CAPACITORS

Туре	CB100	CB150	CB200
Capacitance	100pF	150pF	200pF
Capacitance Tolerance	+ 20%	± 20%	+20%
Max. DC. wkg. Voltage	10000	10000	10000
Max. A.C.+D.C. peak wkg. Volts	7500	7500	7500
Max. RF Current Amps.	30	30	30
Max. RF Volts RMS	5000	5000	5000
Max. Load kVA	150	150	150
Max. Ambient temp °C.	71°C.	71°C.	71°C.
Test Voltage 50 c/s RMS	15000	15000	15000
Temp. Coeff. of Capacitance per °C		arts per n	nillion
*Max. Current for centre stem	50 amp.	at 50c/s o	r DC.

* Where the Capacitor is used in such a manner that the centre stem is required to carry up to 50 amps, of L.F. or D.C. current the Capacitor is provided with a solid copper stem fitted to the tube.

The dimensions are for the 200 pF unit, the length being somewhat less for the other capacitance values.

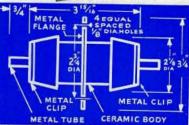
TRANSMITTING CERAMIC DIELECTRIC CAPACITORS

This Capacitor comprises a low loss ceramic disc of H section with heavily silvered electrode surfaces to which terminals in the form of split metal tubes are attached and suitably secured. These terminals provide an easy means of connection of the units in series and is also an excellent R.F. current conductor.

Type Capacitance pF	P.H.I 6·8·8·2 12·0	P.H.2 15. 18. 20	P.H.3 27, 33, 39	P.H.4 47. 56. 68
50c/s Test RMS Max, RF kV.	10kV	lokv	l0kV	82, 100 10kV
Max. RF Amps.	7 · 5 RMS	7.5 RMS	7.5 RMS	7 · 5 RMS
Max, RF kVA Temp. Coeff. parts per	20	35	50	75
million per °C. Capacitance Tolerance	+100	+100	+100	+ 100
	±10%	±10%	±10%	±10%
Dimensions—	1000			
A B	21 mm. 6·35 mm.	28-5 mm. 6-35 mm.	39 mm. 12·7 mm.	54·8 mm. 12·7 mm.
D E F	5·59 mm. 44·4 mm. 19 mm. 12·7 mm.	5·59 mm. 44·4 mm. 19 mm. 12·7mm.	11 · 9 mm. 44 · 4 mm. 19 mm. 12 · 7 mm.	11·9 mm. 44·4 mm. 19 mm. 12·7 mm.

Prices are available upon application







DUBILIERCAPACITORS

TRANSMITTING CERAMIC DIELECTRIC CAPACITORS



Type. Test kV RMS 50 c's Wkg, kV Peak Wkg, kV RMS Max. RMS Amps.	C.53913 15·0 10·0 5·0 40·0	C.56417 30·0 20·0 10·0 40·0
Capacitance 100pF 200pF 300pF 400pF 500pF 600pF 800pF 1000pF Normal Capacitance Tolerance	60 80 120 120 120 120 120 120	kVA 120 240 240 240 240 240 ± 10%
Dimensions— A B C D E	6"" 536" 2" 2"	12" 5½" 42" 3" 1" 16"

Prices are available upon application.

CAPACITORS



For more than a quarter of a century the design and manufacture of Suppressor Capacitors has been an outstanding feature in our activities. Large quantities have been sold and are giving satisfactory service.

The wide technical and engineering experience accumulated thereby, enables us to offer a comprehensive selection of Suppressor Capacitors, suitable for incorporation in electrical equipment to meet the provisions of the Wireless Telegraphy Act (1949).

Our Suppressor Catalogue gives a brief outline of the subject, together with details of the units now available and will be gladly forwarded upon request. Our engineers are also at the disposal of manufacturers who wish to discuss their particular problems with us.





Motor Radio—Interference Suppressor Capacitors

Generators on Motor Cars, Motor Boats and small electric lighting plants cause considerable interference to radio and television reception which it is necessary to suppress.

Here are two popular Dubilier Suppressor Capacitors specially designed for this purpose,

Motor Suppressor Capacitor SVI. 0.5μ F 5/6d. ,, ,, SV2. 1.0μ F 6/6d.

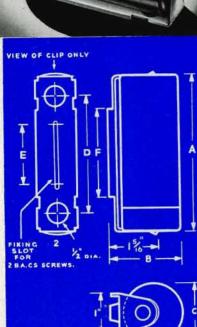


A.C. DRILITIC CAPACITORS

FOR A.C. CAPACITOR-START MOTORS AND OTHER INTERMITTENT APPLICATIONS

Dubilier A.C. Drilitic Capacitors type C.M.S. are designed for A.C. Motor starting and other applications where the applied voltage is of intermittent character within the voltage, temperature and intermittency periods specified.

STREET, AND STREET



CHARACTERISTICS OF TYPE C.M.S. A.C. DRILITIC CAPACITOR

The type C.M.S. A.C. Drilitic capacitors as described are designed for any intermittent A.C. applications within the voltage and temperature ratings given, providing such voltage application does not exceed 60 start-seconds per hour with a maximum duration of 3 seconds per start.

e.g.: I second starts, with not more than 60 starts per hour. or 2 second starts, with not more than 30 starts per hour.

The operating characteristics of these A.C. type Dry Electrolytic Capacitors limit their application only by the wattage loss and their ability to radiate the resultant heat generated. Therefore, any given capacitor will withstand an increased number of voltage applications per minute or an increase of cycle time as long as the generated heat is dissipated, and the temperature of the capacitor does not rise above a definite equilibrium value. This value should not, as a general rule, exceed sixty degrees centigrade.

VOLTAGE RATINGS

The maximum R.M.S. Ratings are as follows:-

Line Voltage	Capacitor Voltage
10 Volts 50 Cycles	150 Volts
30/240 Volts 50 Cycles	275 Volts dependent on or 350 Volts motor design.

These maximum voltage ratings are based on a maximum operating temperature of sixty degrees centigrade.

TEMPERATURE

Due to the fact that the resistivity of the electrolyte employed in A.C. electrolytic capacitors changes appreciably with changes in temperature, there is a corresponding change in power factor and effective capacitance with changes in temperature of capacitors. Operation at low or sub-zero temperatures does no harm to the capacitor, and upon application of the rated operating voltage the higher power factor will cause internal generation of heat, which will quickly raise the temperature of the capacitor, with the result that normal values of capacitance and power factor will be promptly obtained.

A.C. DRILITIC CAPACITORS



CAPACITANCE RATINGS

Selected values of capacitance that have found general use are given in the Table, and show minimum and maximum values of capacitance measured at 50 c/s., and at 80% of their rated voltage.

POWER FACTOR

The power factor of this type of capacitor has been fixed as low as feasible consistent with the best engineering practice. The maximum power factor at which these capacitors are approved is given in the Table.

TESTING A.C. ELECTROLYTIC CAPACITORS

All capacitors are measured for capacitance at 80% of their rated voltage and at a normal ambient temperature of 18° to 20° C. When making such measurements the test voltage should not be applied for longer than two seconds at any time, and any such tests should not be repeated more frequently than once every two minutes.

A.C. DRILITIC CAPACITORS-TYPE C.M.S.

	R.M.S.		itance μF		rent mps.	Max'm	5100		Size in	Inches		
Туре	Volts	Min.	Max.	Min.	Max.	Power Factor	Α	В	С	D ± ⅓	E	F
C.M.S.2 C.M.S.3 C.M.S.4	150	75 100 120	100 125 150	3·54 4·71 5·65	4·71 5·89 7·07	10%	4 16 5 16 5 18	$\begin{array}{c} 2\frac{1}{16} \\ 2\frac{1}{16} \\ 2\frac{5}{16} \end{array}$	13 13 13 16 2 1 16	37 37 37 37 37	1½ 2 2	24 24 23
C.M.S.1 ,,, C.M.S.2 C.M.S.3 ,,,	275	15 20 25 30 40 50 55 60 80	20 25 32 40 50 63 70 80	1·3 1·73 2·16 2·6 3·45 4·32 4·75 5·18 6·91	1·73 2·16 2·76 3·45 4·32 5·45 6·05 6·91 8·65	10%	4 16 " 4 16 " 5 16 " 5 16 " " 5 16 " " 5 16 " " 5 16 " " 5 16 " " 5 16 " " 5 16 " " 5 16 " " 5 16 " " 5 16 " " " 5 16 " " " 5 16 " " " " 5 16 " " " " 5 16 " " " " " 5 16 " " " " " " " " " " " " " " " " " "	1 116 2 16 2 16 2 16	716 ", ", 1436 ", 1436 ", 1436 ", 1436 ", 1436 ", 1436	2 %	1 ½ 1 ½ 2 2	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1
C.M.S.1 C.M.S.2 C.M.S.3 C.M.S.4	350 ., .,	20 35 45 60	25 44 55 80	2·2 3·85 4·95 6·6	2·75 4·83 6·05 8·8	10%	4 16 4 16 5 16 5 16	1 11 16 2 16 2 16 2 16 2 16 2 16	7 16 13 16 16 16 2 16	278 278 378 378		2 k 2 k 2 k 2 k 2 k 2 k 2 k 2 k 2 k 2 k

For large quantities Motor Manufacturers' special clip arrangements can be supplied.

Prices are available upon application

NOTE.—American F.H.P. Motors supplied for use on 230V single phase often employ a capacitor rated at a voltage between 110V and 150V. This is connected in a special manner, and should be replaced with a capacitor of the same rating connected in the same way, notwithstanding the fact that the motor is running on 230V. Certain types of refrigerator motors supplied by leading British Manufacturers prior to 1940 employed the same system.

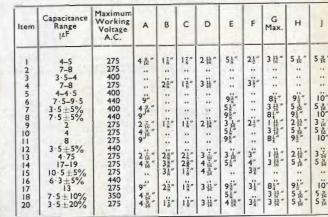


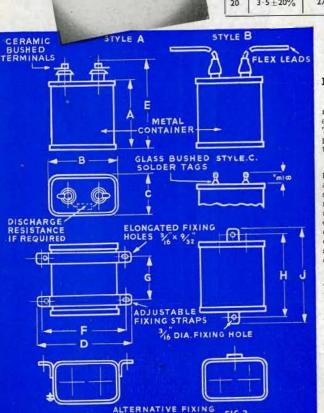
4-75 MFD 1 20%

236 V 50-

NITROGOL CAPACITORS FOR GASEOUS DISCHARGE AND FLUORESCENT LIGHTING

TABLE OF RATINGS AND SIZES





Prices are available upon application

FOR GASEOUS DISCHARGE AND FLUORESCENT LAMP APPLICATIONS

The Nitrogol process has enabled us to produce a range of capacitors for this purpose smaller in size and less in weight than capacitors hitherto available. They can be readily and conveniently placed in position in any of the standard fittings supplied for these lamps including the shallow trough types.

Nitrogol capacitors comprise elements of the multipaper dielectric construction using high purity aluminium foil electrodes and assembled in the crimp seamed and solder sealed containers. The terminals normally fitted are the moulded phenolic resin, silicone-rubber sealed type, with dimensions not exceeding the glass bushed seal style C in the line drawing. Other terminals supplied only to special order. This construction ensures complete hermetic sealing and suitability for use even in damp tropical conditions.

If required these capacitors can be supplied fitted with internal permanently connected discharge resistors.

To special order also the capacitors can be fitted with insulated wire tail connecting leads.

A variety of fixing arrangements is available as indicated in the accompanying drawings.

The table of ratings and sizes shows our normal range of production, but to special requirements many other variations can be produced and enquiries giving particulars of requirements are invited.



SUPPRESSOR UNITS FOR GASEOUS DISCHARGE AND FLUORESCENT LAMPS

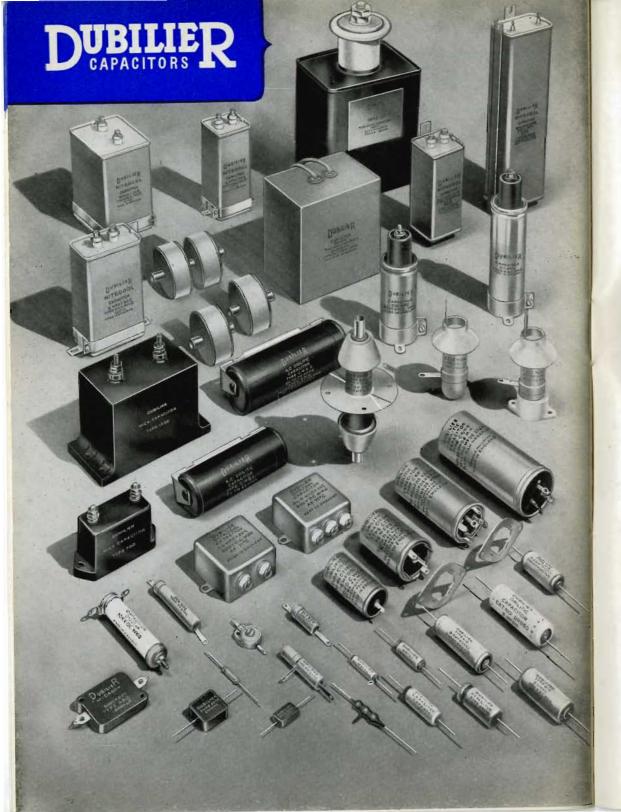
A wide range of units is available for this purpose, incorporating an adequate factor of safety to sustain the voltage surges encountered on this duty. The range includes simple capacitors and capacitor-resistor combinations in the forms of construction indicated in the drawings.

The units are normally available in the following forms. (1) A tubular capacitor of the paper dielectric type in a wax-coated insulating tube and suitable for use except in abnormal conditions of ambient temperature or high atmospheric humidity. Our Type 460. (2) A tubular capacitor similar to the above, but completely hermetically sealed in a metal tube with synthetic rubber end seals which additionally forms the terminal insulation. This type is to be preferred when the ambient temperature and/or atmospheric humidity are abnormal or correspond to tropical conditions. Our type 4700B. (3) A unit comprising a tubular paper dielectric capacitor element, in series connection with a resistor of suitable ohmic value. This is assembled in a metal container with threaded boss for mounting purposes and sealed with high melting point compound. Insulated flexible wire tails are provided for connections. Our Type MC/CR.

NOTE. Other Ratings or different Dimensions can be produced to Special Order

Item	Туре	Capacitance	Voltage	L	D	Length of Screw
1	460	Up to ·02μF	250 A.C.	13"	3"	-
2	4700B	Up to ·02μF	250 A.C.	18″	3"	_
3	MC/CR	Up to ·04μF	250 A.C.	11,"	3"	3″ × 2 BA.

Prices are available upon application



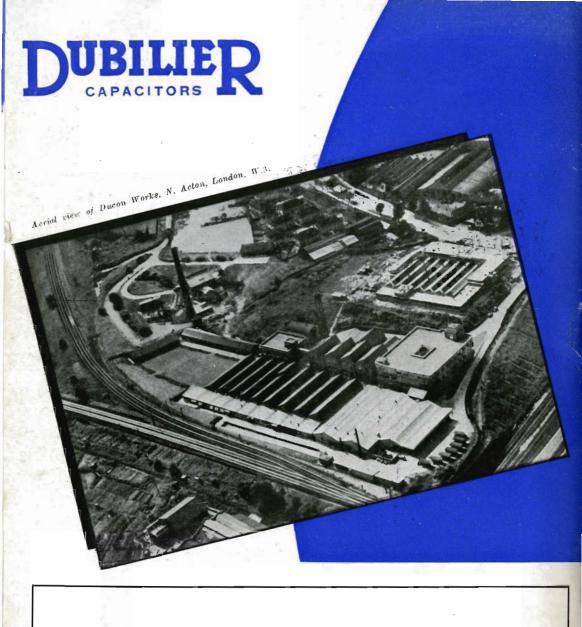
PATENT NUMBERS

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344,776	453,058	519,334	565,521	609,824
358,100	460,909	540,144	567,165	611,900
361,332	460,910	550,047	569,060	613,116
370,890	467,024	550,130	574,577	613,670
376,765	472,272	550,419	580,489	622,882
398,825	478,582	550,502	582,669	623,155
398,929	484,582	550,535	584,552	624,816
416,751	489,283	550,617	587,819	625,459
425,347	489,560	550,999	590,757	629,820
439,531	491,889	551,625	597,309	631,044
439,533	504,748	555,914	601,109	632,134
440,851	504,749	559,376	601,195	635,326
441,901	505,998	563,456	601,220	638,600
442,880	507,596	564,661	603,327	648,048
445,717	510,917	564,971	606,812	and
448,163	511,042	565,243	607,394	others

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