

DUBILIER

CONDENSERS

&

RESISTANCES

DUBILIER FOR DEPENDABILITY

WILLIAM DUBILIER
339 GARDEN ROAD
PALM BEACH, FLORIDA 33480

THE

House of Dubilier

THE past year has witnessed further substantial progress in the virile art of Radio, reflected as it is in Dubilier Condensers and Resistances! So great is their fame for dependability and reliability throughout the whole world that they need no introduction.

Dubilier Condensers and Resistances have built up a reputation that is second to none. The name is a *Hall Mark* of quality and reliability. British and Foreign Government Departments, Radio Manufacturers, designers and constructors, testify to the excellence of Dubilier products by continually using and specifying them in preference to all others.

This wonderful reputation has only been achieved by years of patient research and by the accumulated experience of a generation of skilled engineers.

"Dubilier for Dependability!" This is the aim of the whole Dubilier organisation. It is the reason why so many millions of Dubilier Condensers and Resistances are in use throughout the world to-day. Bear this well in mind when next you buy Condensers or Resistances and be sure of satisfaction.

August, 1934.



DUBILIER MINIMISES SERVICING

MICA CONDENSERS

Types 665, 670, 610 and 620.

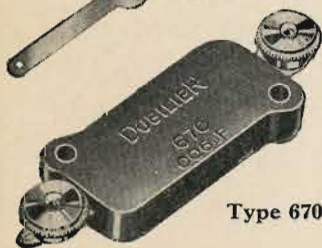
Intricate moulding-in after assembly ensures perfect sealing, protection and strength while maintaining a low power factor.

Type 665 is universal in application; it can be conveniently suspended in the wiring system of a receiver or fixed to terminals of other components, facilitating compact assembly.

Type 670 is the only flat, baseboard type condenser on the market with unobtrusive terminals.



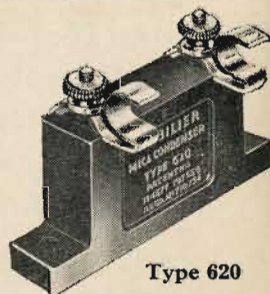
Type 665



Type 670



Type 610



Type 620

Type 665 and 670 Condensers are packed for sale to the trade in boxes containing 1 dozen.

Standard capacity tolerance $\pm 15\%$. 250 v. D.C. peak working. 500 v. A.C. test.			
Type 665.		Type 670.	
Capacity $\mu\text{F.}$	Price Each.	Capacity $\mu\text{F.}$	Price Each.
·0001	6d.	·00005	1/-
·0002	6d.	·0001	1/-
·0003	6d.	·0002	1/-
·0005	9d.	·0003	1/-
		·0005	1/-
		·001	1/3
		·002	1/3
		·005	1/6
		·006	1/6
		·01	2/-

Recommended for use in H.F. circuits and where higher voltages are involved.			
Type 610 and 620. 250 v. D.C. working. 500 v. A.C. test.		Type 620. 500 v. D.C. working. 1000 v. D.C. test	
Capacity $\mu\text{F.}$	Price Each.	Capacity $\mu\text{F.}$	Price Each.
·0001 to ·0005 with Grid Leak Clips	1/3	·0001 to ·0005	2/6
·00005 to ·0009 with Grid Leak Clips and Series Parallel Clips	1/8	·001 to ·004	3/-
·001 to ·002	2/-	·005	3/3
·003, ·004, ·005	2/3		
·006	2/6		
·01	3/-		

DUBILIER FOR RELIABILITY

MICA CONDENSERS



High grade Mica Condensers designed for use in receivers and amplifiers where operating conditions demand larger capacities and higher voltages.

Condensers of this type can be supplied for operation at higher potentials, and also to closer tolerances at a commensurate increase in price. The standard capacity tolerance being $\pm 15\%$.

250v. D.C. working. 500v. D.C. test.		
Type.	Capacity $\mu\text{F.}$	Price Each.
B775	·01	3/-
B775	·02	3/6
B775	·05	5/6
B775	·1	8/-
B776	·2	14/6
B776	·25	18/-
B777	·5	32/6

500v. D.C. working. 1000v. D.C. test.		
Type.	Capacity $\mu\text{F.}$	Price Each.
B770	·01	3/6
B770	·02	5/-
B770	·03	6/-
B770	·05	8/-
B770	·1	12/-

DUBILIER UNIVERSALLY ACCLAIMED

PAPER DIELECTRIC CONDENSERS

Type BB.



Type BB

250v. D.C. Working. 500v. D.C. Test.				
Capacity μF.	Overall Size.			Price Each.
	Thickness	Width	Height	
Up to .09	11/16"	2 3/4"	3"	1/9
.1	11/16"	2 3/4"	3"	1/10
.2	11/16"	2 3/4"	3"	2/-
.25	11/16"	2 3/4"	3"	2/3
.5	11/16"	2 3/4"	3"	2/6
1.0	1"	2 3/4"	3"	2/6
2.0	1"	2 3/4"	3"	3/6
4.0	2 1/8"	2 3/4"	3"	5/6

These Condensers are the familiar non-inductive types assembled into moulded bakelite cases for use in broadcast receivers.

TUBULAR PAPER TYPES.

Non-inductive and with side connecting Wires.



400v. D.C. Peak Wkg. 1000v. D.C. Test.				
Type.	Capacity μF.	Size. Lgth. Dia.		Price Each.
4501	.001 to .02	1 1/4"	7/16"	1/-
4502	.025 to .03	1 3/8"	7/16"	1/3
4503	.04 to .1	1 3/8"	9/16"	1/4
4504	.15 to .2	2 1/4"	9/16"	1/6
4505	.25 to .3	2 1/4"	1 1/8"	1/9
4506	.4 to .5	2 1/4"	1"	2/-

Recommended for use in tuned circuits where a non-inductive condenser is essential. The thoroughly impregnated bakelised tube completely seals and protects the condenser. The side connecting wires facilitating easy assembly in all types of receivers.

THE WORLD'S FINEST CONDENSERS

PAPER DIELECTRIC CONDENSER BLOCKS

The accompanying tables detail a selection of the most popular combinations of Condensers made up into Blocks, together with a range suitable for use with Westinghouse Metal Rectifiers in Voltage-Doubling circuits.

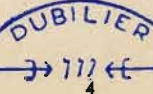
CONDENSER BLOCKS

D.C. Volts.		Total Capacity μF.	Type No.	Arrangement of Tags.	Arrangement of Tappings.	Dimensions.			Price Each.
Working.	Test.					W.	L.	H.	
250	500	6	BE1	Top	2+2+2C	3 3/8"	1 3/4"	2 1/4"	6/3
250	500	2	BE110	Top	1+1C	1 3/4"	1 3/8"	2 1/4"	3/6
250	500	6	BE135	Top	2+2+1+1C	2 1/2"	2"	2 1/4"	6/3
300	650	16	BE266	Side	1+1+2+4+4+4C	4 1/2"	2 1/2"	4"	21/-
400	1000	4	BE253	Top	1+1+2C	2 1/4"	1 3/8"	2 1/4"	5/6
500	1250	0.2	BE256	Top	0.1+0.1C	1 11/16"	1"	3/4"	2/6
500AC	1000AC	.02	BE328	Top	.01+.01	1 3/4"	3/4"	2 1/4"	2/6
500AC	1500AC	0.2	BE31L	Top (wires)	0.1+0.1	1 3/4"	3/4"	2 1/4"	3/-
1700DC	5500DC	12	BE73	Top	6+6C	5 1/2"	10"	12"	100/-

C.—Denotes common earth tag.

Condenser Blocks for use in conjunction with Westinghouse Metal Rectifiers in Voltage Doubling Circuits

Westinghouse Rectifier Type No.	Capacity of each Voltage Doubling for 50 cycles.	D.C. Wkg. Voltage.	Condenser Type No.	Dimensions.			Price Each.
				W.	L.	H.	
HT 5	4	200	BE316	3"	2"	2 1/4"	8/-
HT 8	4	350	BE355	3"	2 3/4"	2 1/4"	13/-
HT10	8	250	BE361	2 1/2"	4"	4 3/4"	20/-
HT11	8	500	BE362	4"	4 1/2"	4 3/4"	27/6
HT12	4	200	BE316	3"	2"	2 1/4"	8/-



NON-INDUCTIVE CONDENSERS

Type 9200.

The 9200 type non-inductive Condenser represents the latest design in Condenser practice and affords the discerning condenser user the finest value possible.



These Condensers are of true non-inductive construction. The connection is made all along the total length of the foil and not merely by the provision of a few extra lugs. The two lead-in wires form a non-inductive pair so that the self inductance of the Condenser is too minute to be measured and is generally masked by that of the external associated wiring. The Condensers are fitted into substantially made and attractive looking aluminium containers of registered design,

offering an unique but simple and effective method of fastening the Condenser to the chassis and taking up a minimum of space (see Fig. 1).

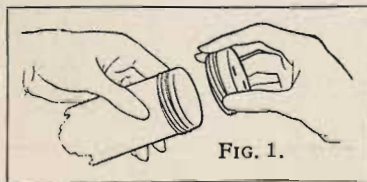


FIG. 1.

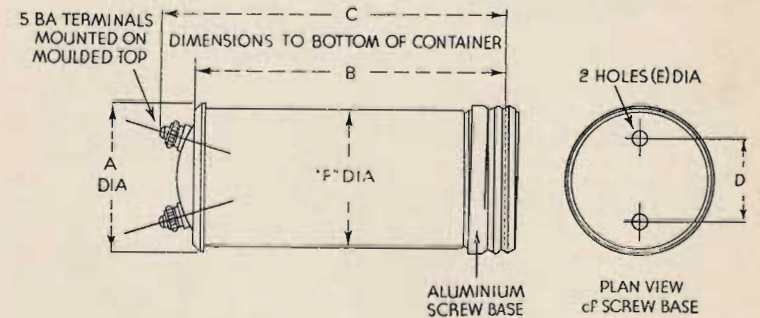
The accompanying data gives details of this range of Condensers, which are available in standard capacities suitable for operation on maximum peak voltages of 300-900 volts D.C. They are ideally suited for by-passing high frequency and ultra high-frequency currents.



DUBILIER NON-INDUCTIVE PAPER DIELECTRIC CONDENSERS IN CYLINDRICAL ALUMINIUM CONTAINERS

Types BS, 9200, LSB, LSA, LEG, and LSG.

TYPE	BS		9200		LSB		LSA		LEG		LSG	
Max. Wkg. Peak Volts. Test Volts.	250 500		300 650		350 800		400 1000		650 1500		900 D.C. 2500 D.C.	
Capacity μ F.	Price Each	Type No.	Price Each	Type No.	Price Each	Type No.	Price Each	Type No.	Price Each	Type No.	Price Each	Type No.
Up to 0.1	1/9	9200	2/-	9200	2/-	9200	2/-	9200	2/6	9200	3/-	9200
0.2	1/9	9200	2/-	9200	2/-	9200	2/-	9200	2/6	9200	—	—
0.25	—	9201	2/-	9200	2/-	9200	2/-	9200	3/-	9201	4/6	9201
0.5	—	9201	2/-	9200	2/-	9200	2/6	9201	3/6	9201	6/-	9202
1.0	2/-	9202	2/6	9201	2/9	9201	3/-	9201	5/6	9202	8/6	9203
2.0	2/6	9202	3/6	9201	4/-	9201	4/6	9202	8/-	9203	12/-	9204
3.0	3/9	9203	5/6	9202	6/-	9202	6/6	9202	10/6	9204	—	—
4.0	5/-	9204	7/-	9202	7/6	9202	8/-	9203	10/6	9204	—	—
5.0	—	—	8/6	9203	9/6	9203	10/-	9203	—	—	—	—
6.0	—	—	10/6	9203	11/6	9203	12/-	9204	—	—	—	—
7.0	—	—	11/6	9203	12/6	9203	13/6	9204	—	—	—	—
8.0	—	—	13/-	9204	14/-	9204	15/-	9204	—	—	—	—
9.0	—	—	14/6	9204	15/6	9204	—	—	—	—	—	—
10.0	—	—	16/-	9204	17/-	9204	—	—	—	—	—	—



Box Type	A	B	C	D	E	F
9200	2 3/32"	2 11/16"	3 1/2"	1 1/8"	3/16"	1 1/8"
9201	1 13/32"	2 11/16"	3 1/8"	1 1/8"	3/32"	1 1/2"
9202	1 3/32"	4 1/8"	5 3/8"	1 1/8"	3/32"	1 1/8"
9203	1 3/32"	4 1/8"	5 3/8"	1 1/8"	3/32"	1 7/8"
9204	2 11/32"	4 1/8"	5 3/8"	1 1/8"	3/32"	2 1/4"



DUBILIER UNIVERSALLY ACCLAIMED

PAPER DIELECTRIC CONDENSERS IN RECTANGULAR METAL CONTAINERS

Dubilier paper dielectric condensers are well known to manufacturers and experimenters throughout the world for their unfailing reliability.

Made of the highest grade foil and specially prepared paper they are thoroughly impregnated by a vacuum process and sealed against atmospheric penetration.

The following tables are a comprehensive survey of the types available embracing all the usual requirements.



Type BS.

Max. Working Peak Volts 250 D.C.
Test Volts 500 D.C.

Capacity μF.	Width	Depth	Overall Height	Price Each with Terminals
1.0	2 1/8"	5/8"	4 15/16"	2/-
2.0	2 1/8"	1"	4 15/16"	2/8
4.0	2 1/2"	1 1/8"	4 15/16"	5/-

Type LSB.

Max. Working Peak Volts 350 D.C.
Test Volts 800 D.C.

Capacity μF.	Width	Depth	Overall Height	Price Each with Terminals
Up to .1	1 1/8"	1"	2 13/16"	2/-
.2	1 1/8"	1"	2 13/16"	2/2
.25	1 1/8"	1"	2 13/16"	2/4
.5	1 1/8"	1"	2 13/16"	2/6
1.0	1 1/8"	1"	2 13/16"	3/-
2.0	1 3/8"	1 1/8"	2 13/16"	4/6
4.0	2 1/8"	2 1/8"	2 13/16"	8/-
6.0	2 3/8"	1 1/4"	5 7/16"	12/-

Type LSA.

Max. Working Peak Volts 400 D.C.
Test Volts 1000 D.C.

Capacity μF.	Width	Depth	Overall Height	Price Each with Terminals
Up to .1	1 1/8"	1"	5 3/16"	2/-
.2	1 1/8"	1"	5 3/16"	2/2
.25	1 1/8"	1"	5 3/16"	2/4
.5	1 1/8"	1"	5 3/16"	2/6
1.0	1 1/8"	1 1/8"	5 3/16"	3/-
2.0	1 3/8"	1 1/8"	5 3/16"	4/6
4.0	1 3/8"	1 1/8"	5 3/16"	8/-
6.0	2 1/8"	2 1/8"	5 3/16"	12/-
10.0	3 3/8"	2 1/8"	5 3/16"	18/-

THE WORLD'S FINEST CONDENSERS

PAPER DIELECTRIC CONDENSERS IN RECTANGULAR METAL CONTAINERS.

Type LEC				
Max. Working Peak Volts 500 D.C. Test Volts 1250 D.C.				
Capacity μF.	Width	Depth	Overall Height	Price Each with Terminals
Up to .1	1 1/8"	1"	2 13/16"	3/-
.2	1 1/8"	1"	2 13/16"	3/6
.25	1 1/8"	1"	2 13/16"	3/6
.5	1 1/8"	1"	2 13/16"	4/3
1.0	1 1/8"	1"	2 13/16"	5/-
2.0	1 3/8"	1 1/8"	2 13/16"	7/-
4.0	2 1/8"	2 1/8"	2 13/16"	12/6
6.0	2 3/8"	2 3/8"	2 13/16"	18/-

Type LEG				
Max. Working Peak Volts 650 D.C. Test Volts 1500 D.C.				
Capacity μF.	Width	Depth	Overall Height	Price Each with Terminals
Up to .1	1 1/8"	1"	2 13/16"	4/-
.2	1 1/8"	1"	2 13/16"	4/-
.25	1 1/8"	1"	2 13/16"	4/6
.5	1 1/8"	1"	2 13/16"	5/-
1.0	2 3/8"	1"	2 13/16"	5/10
2.0	2 3/8"	1 1/8"	2 13/16"	8/6
4.0	2 1/8"	2 3/8"	2 13/16"	16/-
6.0	2 3/8"	3 3/8"	2 13/16"	23/-

Type LCG				
Max. Working Peak Volts 700 D.C. Test Volts 1750 D.C.				
Capacity μF.	Width	Depth	Overall Height	Price Each with Terminals
Up to .1	1 1/8"	1"	2 13/16"	5/-
.2	1 1/8"	1"	2 13/16"	5/-
.25	1 1/8"	1"	2 13/16"	5/6
.5	1 1/8"	1"	2 13/16"	6/-
1.0	1 1/8"	1 1/8"	2 13/16"	7/6
2.0	2 3/8"	1 1/8"	2 13/16"	10/-
4.0	3"	3"	2 13/16"	19/4
6.0	4"	3 5/8"	2 13/16"	28/6
8.0	4 1/2"	4 1/4"	2 13/16"	32/6

Type LSG				
Max. Working Peak Volts 900 D.C. Test Volts 2500 D.C.				
Capacity μF.	Width	Depth	Overall Height	Price Each with Terminals
Up to .1	2 1/8"	7/8"	5 7/16"	6/-
.2	2 1/8"	7/8"	5 7/16"	6/-
.25	2 1/8"	7/8"	5 7/16"	6/6
.5	2 1/8"	7/8"	5 7/16"	7/-
1.0	2 1/8"	1 3/8"	5 7/16"	8/6
2.0	2 3/8"	2 1/8"	5 7/16"	12/6
4.0	4 1/8"	2 1/8"	5 7/16"	24/6
6.0	6 1/8"	2 1/8"	5 7/16"	35/-

DUBILIER

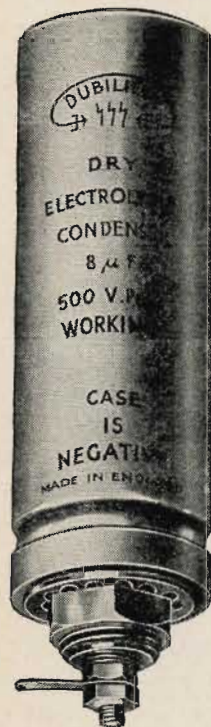
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DUBILIER MINIMISES SERVICING

HIGH VOLTAGE DRY ELECTROLYTIC CONDENSERS



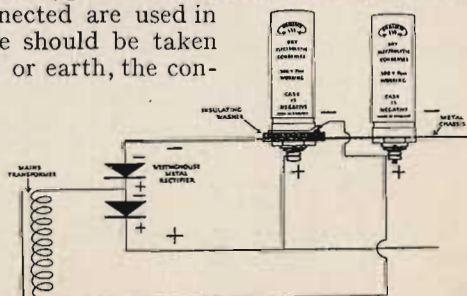
Dubilier High Voltage Dry Electrolytic Condensers are the result of an intensive investigation, coupled with careful selection of the very best materials and the highest class of skilled workmanship. This is why they are used by all the leading Set Manufacturers and Designers to whom reliability is imperative. These electrolytic condensers can be used in all circuits where there is a polarizing D.C. voltage which, with the addition of any alternating or ripple voltage is below the specified maximum safe peak for the type used. They may be mounted in any position. Care must be taken to observe the correct polarity to avoid damage to the condenser.

The Reversible types of Dry Electrolytic Condensers have been designed primarily for use in Universal and D.C. receivers to avoid the risk of damage to the receiver, due to reversal of polarity in the event of the receiver mains plug being inserted the wrong way round.

Like other types of Electrolytic Condensers, the Reversible types require a polarizing voltage, and should never be used on unrectified A.C. only.

When the aluminium container types of electrolytic condensers, with the container negatively connected are used in voltage-doubling circuits, care should be taken to insulate from the chassis or earth, the container of the condenser on the positive side of the voltage doubling system. Special insulating washers and connecting tag washers can be supplied for this purpose. (See diagram)

Price 6d. per set.



DUBILIER FOR RELIABILITY

HIGH VOLTAGE DRY ELECTROLYTIC CONDENSERS

Cylindrical Aluminium Containers. Inverted single hole chassis mounting ($\frac{3}{4}$ " dia.), containers connected to negative. 500 v. D.C. Peak Working

Capacity.	Type.	Height.	Diameter.	Price Each.
4 μ F.	0283	5 $\frac{7}{16}$ "	1"	4/6
6 μ F.	0281	5 $\frac{7}{16}$ "	1 $\frac{1}{2}$ "	5/-
8 μ F.	0281	5 $\frac{7}{16}$ "	1 $\frac{1}{2}$ "	5/6

Height above chassis 4 $\frac{1}{2}$ ".

MULTIPLE CAPACITY DRY ELECTROLYTIC CONDENSERS

Cylindrical Aluminium Containers. Inverted single hole chassis mounting ($\frac{3}{4}$ " dia.), with Flexible Leads. 500 v. D.C. Peak Working.

Capacity μ F.	Type.	Construction Details.	Number of Leads.	Height Overall.	Diameter Overall.	Price Each.
8+8	9203E	Case negative	2	5 $\frac{1}{2}$ "	1 $\frac{3}{16}$ "	9/6
8&8	9203E	Case isolated	4	5 $\frac{1}{2}$ "	1 $\frac{3}{16}$ "	10/-
8+4	9203E	Case negative	2	5 $\frac{1}{2}$ "	1 $\frac{3}{16}$ "	8/-
8&4	9203E	Case isolated	4	5 $\frac{1}{2}$ "	1 $\frac{3}{16}$ "	8/6

Height above chassis 4 $\frac{1}{8}$ ".

REVERSIBLE DRY ELECTROLYTIC CONDENSERS.

Cylindrical Aluminium Containers. Inverted single hole chassis mounting ($\frac{3}{4}$ " dia.). 275 v. D.C. Peak Working.

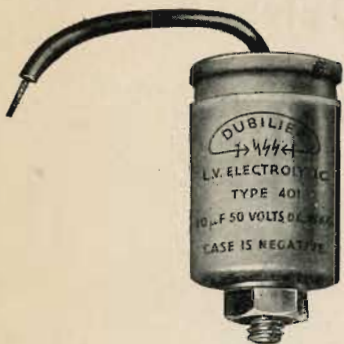
Capacity μ F.	Type.	Construction Details.	Number of Leads.	Height Overall.	Diameter Overall.	Price Each.
8+4	9203E	Case isolated	3	5 $\frac{1}{2}$ "	1 $\frac{3}{16}$ "	10/-
8+8	9203E	Case isolated	3	5 $\frac{1}{2}$ "	1 $\frac{3}{16}$ "	12/6
8	0281	Case negative	Terminal	5 $\frac{3}{16}$ "	1 $\frac{1}{8}$ "	7/6

Height above chassis, 9203E, 4 $\frac{1}{8}$ "; 0281, 4 $\frac{1}{2}$ ".



DUBILIER FOR DEPENDABILITY

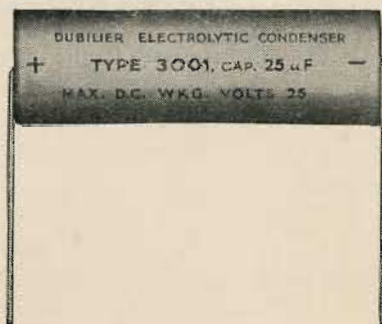
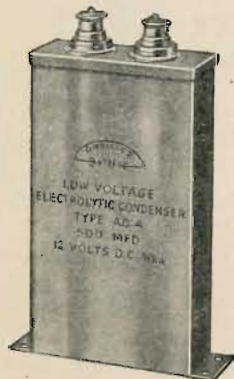
LOW VOLTAGE DRY ELECTROLYTIC CONDENSERS



This range of condensers has been extended by the addition of new types to meet the requirements of the latest valves and circuits.

The chief uses for these Condensers are, grid bias decoupling, and other forms of low voltage decoupling and smoothing.

Type AD Condensers are largely used for smoothing the hum from the energised field of low voltage moving-coil loud speakers.

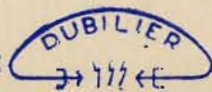


Types 401 and 402 Condensers are assembled into aluminium containers, the container being negative; a $\frac{1}{4}$ " Whitworth stud and nut provided for one hole fixing and a 6" long flexible lead at the top forms the positive connection.

Types 3001 and 3003 Condensers are assembled in impregnated, bakelised, tubular containers with suitable connecting wires at each end. They are clearly marked, positive and negative, and this polarity must be strictly observed.

Types AD are assembled in rectangular metal containers. The positive and negative connections are clearly marked and the correct polarity must be strictly observed.

NOTE. These condensers are marked + or coloured red at their positive terminals or wires according to the type.



DUBILIER MINIMISES SERVICING

LOW VOLTAGE DRY ELECTROLYTIC CONDENSERS

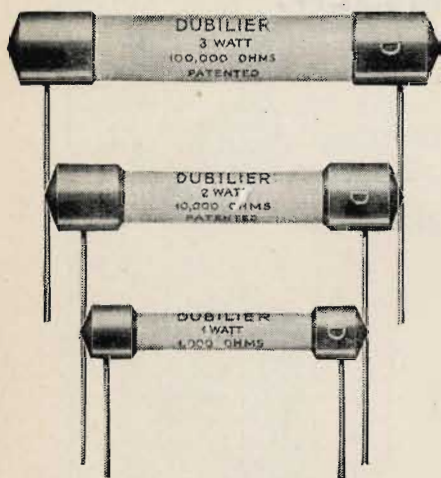
Max. Working Voltage D.C.	Capacity μ F.	Type No.	Dia-meter.	Length	Depth.	Height.	Price
10	200	0283	1 $\frac{1}{8}$ "	—	—	4 $\frac{1}{2}$ "	4/6
12	20	401	1"	—	—	1 $\frac{11}{16}$ "	2/6
12	50	402	1"	—	—	2 $\frac{11}{16}$ "	3/-
12	50	3001	$\frac{3}{4}$ "	2 $\frac{1}{4}$ "	—	—	2/-
12	500	AD4	—	3 $\frac{1}{4}$ "	1"	5 $\frac{3}{16}$ "	7/6
12	1,000	AD5	—	3 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "	5 $\frac{3}{16}$ "	10/-
12	2,000	AD6	—	3 $\frac{1}{4}$ "	2 $\frac{1}{2}$ "	5 $\frac{3}{16}$ "	15/-
12	4,000	AD7	—	5 $\frac{1}{4}$ "	3"	5 $\frac{3}{16}$ "	26/-
12	2,000 + 2,000	AD7 with 3 terminals	—	5 $\frac{1}{4}$ "	3"	5 $\frac{3}{16}$ "	27/6
25	10	401	1"	—	—	1 $\frac{11}{16}$ "	2/6
25	20	401	1"	—	—	1 $\frac{11}{16}$ "	2/6
25	25	3001	$\frac{3}{4}$ "	2 $\frac{1}{4}$ "	—	—	2/-
50	6	401	1"	—	—	1 $\frac{11}{16}$ "	2/6
50	10	401	1"	—	—	1 $\frac{11}{16}$ "	2/6
50	12	3001	$\frac{3}{4}$ "	2 $\frac{1}{4}$ "	—	—	2/-
50	20	402	1"	—	—	2 $\frac{11}{16}$ "	3/-
50	50	3003	1 $\frac{3}{8}$ "	2 $\frac{3}{4}$ "	—	—	4/-
50	50	0281	1 $\frac{1}{8}$ "	—	—	4 $\frac{1}{2}$ "	5/6
100	10	402	1"	—	—	2 $\frac{11}{16}$ "	3/-



DUBILIER UNIVERSALLY ACCLAIMED

DUBILIER METALLIZED RESISTANCES

Impervious to Humidity, Heat Resistant, Strong and Silent.



These world-famous resistances continue to hold their premier position in the minds of all skilful and experienced designers, as proven by the millions in satisfactory use.

Every individual resistance is subjected to stringent tests before it is permitted to leave the factory.

Prices for standard values from 100 ohms to 500,000 ohms:—

1 watt rating 1/- each.
2 watt rating 2/- each.
3 watt rating 3/- each.

Grid Leaks having the same physical dimensions as the 1 watt resistances are available as follows:—

·25 MΩ., ·5 MΩ., 1 MΩ.,
2 MΩ., 3 MΩ., 4 MΩ.,
5 MΩ., 10 MΩ. .. 1/- each.

British Patent No. 254,894—sold under limited licence.

Overload Characteristics.

The overload characteristics of a resistance indicate to a large extent the safety factor inherent in the design.

Tests made with Dubilier Metallized Resistances reveal their ability to withstand considerable overload. For instance, these resistances have been subjected to tests at 100% overload applied continuously for a period of 100 hours. Measurements of their resistance values have been made periodically during the overload test and also at the conclusion after cooling down to initial room temperature. The results show that for the range of values below 500,000 ohms, the changes during the period of overload did not exceed 10% and all resistances after test recovered to within two or three per cent. of their initial values.

Such tests represent much more severe operating conditions than they will encounter in normal service, and they clearly demonstrate the great stability and dependability of Dubilier Metallized Resistances.

Radio Frequency Characteristics.

Dubilier Metallized Resistances are sensibly non-inductive at radio frequencies as they consist of single straight conductors only. Further, owing to their unique construction the ratio of high frequency resistance to D.C. resistance is almost unity. Measurements of Resistances made with D.C. may therefore be used at broadcast radio frequencies with negligible error. For example, a number of 1 megohm Resistances measured at 750 kc. showed resistance values between 95 per cent. and 100 per cent. of their D.C. values, the differences being no greater than the probable order of magnitude of errors of measurement.



THE WORLD'S FINEST RESISTANCES

DUBILIER METALLIZED RESISTANCES

Resistance ohms.	ONE WATT Price 1/- each		TWO WATT Price 2/- each		THREE WATT Price 3/- each	
	Max. Current mA.	Max. Voltage.	Max. Current mA.	Max. Voltage.	Max. Current mA.	Max. Voltage.
100	100·0	10·0	141·4	14·1	173·0	17·3
250	63·2	15·8	89·3	23·3	108·0	27·3
500	44·8	22·3	60·3	31·6	76·0	38·7
1000	31·6	31·6	44·7	44·7	55·0	54·7
1500	25·8	38·7	36·4	54·7	45·0	67·0
2000	22·3	44·7	31·6	63·2	39·0	77·4
2500	20·0	50·0	28·2	70·7	34·5	86·6
3000	18·2	54·7	25·8	77·4	31·5	95·0
3500	16·9	59·1	23·9	83·6	28·0	102·0
4000	15·8	63·2	22·3	89·4	27·5	110·0
5000	14·1	70·7	20·0	100·0	24·4	122·0
6000	12·9	77·4	18·2	109·5	22·3	134·0
7000	11·9	83·6	16·9	118·3	20·7	145·0
8000	11·1	89·4	15·8	126·4	19·3	155·0
9000	10·5	94·8	14·9	134·1	18·2	164·0
10000	10·0	100·0	14·1	141·4	17·3	173·0
12000	9·1	109·5	12·9	154·9	15·8	190·0
12500	8·9	111·8	12·6	158·1	15·5	194·0
15000	8·1	122·4	11·5	173·2	14·2	212·0
17500	7·5	132·2	10·7	187·0	13·0	229·0
20000	7·0	141·4	10·0	200·0	12·2	245·0
25000	6·3	158·1	8·9	223·6	11·2	273·0
30000	5·7	173·2	8·1	244·9	10·0	300·0
40000	5·0	200·0	7·0	282·8	8·6	345·0
50000	4·4	223·6	6·0	316·2	7·7	385·0
75000	3·6	273·8	5·1	387·3	6·3	474·0
100000	3·1	310·0	4·4	440·0	5·5	550·0
150000	2·5	375·0	3·6	540·0	4·5	670·0
200000	2·2	440·0	3·1	630·0	3·5	700·0
250000	2·0	500·0	2·8	700·0	2·8	700·0
300000	1·8	540·0	2·3	700·0	2·3	700·0
400000	1·5	600·0	1·7	700·0	1·7	700·0
500000	1·4	700·0	1·4	700·0	1·4	700·0

These Resistances are packed in boxes containing one dozen for sale to the trade.

Sold under limited licence. British Patent Number 254,894.



COLOUR CODED RESISTANCES

Dubilier Metallized Resistances are supplied coloured according to the international standard colour code, to indicate their value in ohms. They are available in kits of twenty of the most called for values which will be found extremely useful to dealers and service men. Price 20/- per kit containing 20 one watt resistances.

Dubilier half-watt colour coded resistances are available to dealers, and service-men for servicing only, and not for sale to the public, at the price of 6d. each.



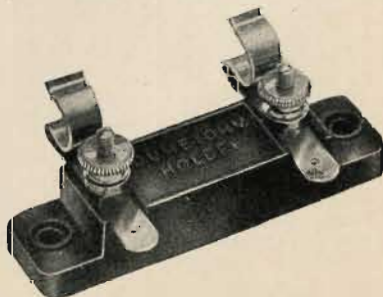
A resistance having a green body, black end ring and orange dot has a value of 50,000 ohms.

The following is the complete list of colours, with their corresponding values :—

1st Figure, "Body."	2nd Figure, "End."	Ciphers, "Dot."
0 = Black	0 = Black	None = Black
1 = Brown	1 = Brown	0 = Brown
2 = Red	2 = Red	00 = Red
3 = Orange	3 = Orange	000 = Orange
4 = Yellow	4 = Yellow	0000 = Yellow
5 = Green	5 = Green	00000 = Green
6 = Blue	6 = Blue	000000 = Blue
7 = Violet	7 = Violet	
8 = Grey	8 = Grey	
9 = White	9 = White	

RESISTANCE HOLDERS

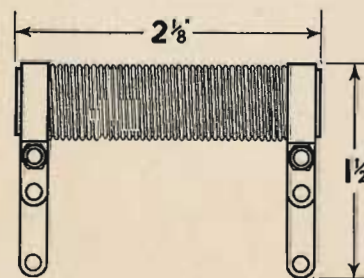
Dubilier Resistance Holder, suitable to accommodate Metallized Resistances, one watt type, or Grid Leaks. Price, 1/- each.



"SPIROHM" TEN-WATT WIRE-WOUND RESISTANCES

These Resistances are constructed with high resistance wire spiralled on to asbestos insulation and supported by a grooved porcelain former. They are particularly suitable for those positions where heavy loading is called for in high-power amplifiers, electric gramophones and radio gramophones, etc., the standard size being capable of a continuous dissipation of ten watts.

Resistance.	Milliamps.	Price Each.
200 ohms	200	3/-
500 "	140	3/-
1,000 "	100	3/-
2,500 "	60	3/-
5,000 "	45	3/-
7,500 "	35	3/6
10,000 "	30	3/6
20,000 "	20	4/-
30,000 "	15	4/-
50,000 "	10	5/-



Dubilier Spirohms are available in a range of resistance values from 200 to 50,000 ohms, to meet all the popular demands. These resistances can be closely adjusted to the specified value, and tappings may be provided by means of additional clips. The rated

wattage is that for the whole of the resistance and the maximum safe dissipation between tappings will be proportionately less.

DUBILIER FOR RELIABILITY

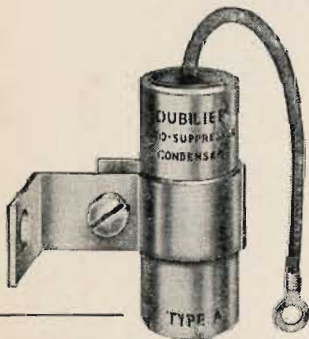
MOTOR RADIO SUPPRESSORS



Price of Single Suppressor Plug Type 2/6



Price of Single Suppressor Distributor Type 3/-



Suppressor Condensers

For connecting across make and break contacts, cutout contacts and dynamo brushes. One side of the Condenser is connected to the container for earthing purposes.

Type A. 0.5 μ F. 2/6 each.
Type B. 1.0 μ F. 3/- each.

Complete satisfaction from motor radio can only be obtained by eliminating all electrical noise originating in the motor vehicle. Minute sparking which always exists at the car generator brushes is a common source of interference. A 1 μ F Dubilier Suppressor Condenser should be connected as shown at C1 in diagram (page 19) as close to the brushes as possible. If sparking is bad the commutator should be cleaned with glass paper and brushes properly bedded.

The spark occurring at the interrupter of the ignition coil is another source of noise. A 1 μ F Dubilier Suppressor Condenser should be connected as shown at C2 in diagram (page 19) as close as possible to the interrupter. One terminal of the Suppressor Condenser is connected to earth.

The chief sources of interference are found at the sparking plugs and the distributor. The sparks generate radio waves which are radiated by the sparking plug cables acting as an aerial.

This trouble may be eliminated by connecting a Dubilier Plug Type Suppressor at each plug and connecting a Dubilier Distributor Suppressor at the distributor. The Plug Suppressors are made to fit either vertically or horizontally with respect to the plug, alternative fixing holes being provided. The plug cable should be removed and connected to one end of the Plug Suppressor, which can then be tightly fixed to the sparking plug terminal in the most convenient manner.

The distributor feed cable should be removed from the distributor and connected to one end of the Distributor Suppressor, the other end being plugged into the distributor. The clearance between the distributing brush and the contacts should be kept as small as possible to facilitate noise suppression. The diagram on page 19 shows the method of connecting the various Suppressors to the ignition system of a modern car or boat.

The Suppressors are packed in cartons in sets as follows:—

For Four-Cylinder Cars. Four Plug Suppressors and one Distributor Suppressor	10/6 per set
For Six-Cylinder Cars. Six Plug Suppressors and one Distributor Suppressor	15/- per set

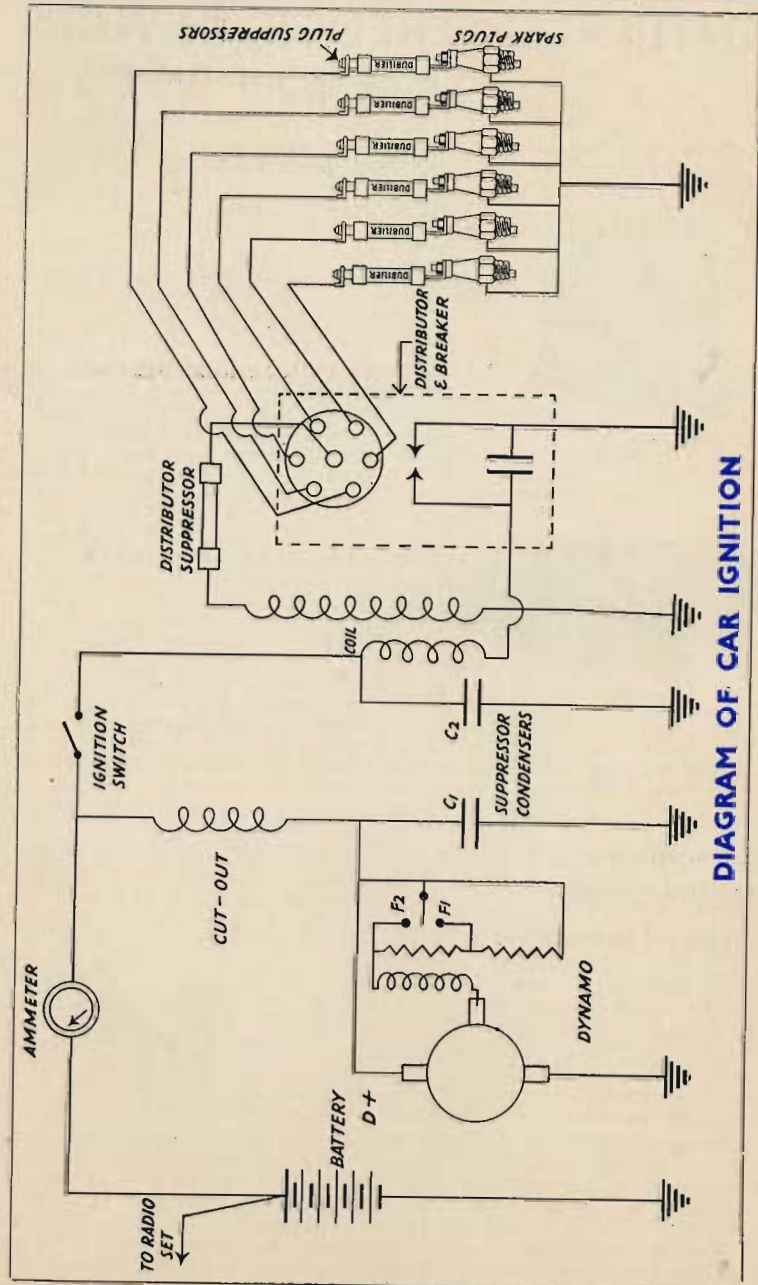
Choke Filter Unit.

For insertion in series with generator leads to eliminate interference borne along these wires. Type 56003 for use with 12 volt equipment only

£3 0 0 each



DUBILIER FOR DEPENDABILITY



DUBILIER MINIMISES SERVICING

ANTI-INTERFERENCE DEVICES



Type 305/051.



Type 66922

DUBILIER INTERFERENCE FILTER UNITS.

For use with Mains apparatus rated at 250 v. A.C. or under.

SINGLE STAGE CONDENSER FILTERS.

	Type.	Price.
For use with small motors, such as sewing machines	*301/851	5/-
For use with the majority of household appliances. Also for use at house supply entry	*305/051	7/6
Suitable for machines up to about 1 kw capacity. Also for use at house supply entry	*320/051	10/6
	*220/001	9/6
With B.O.T. type porcelain bridge fuses, mounted in cast iron box with fixings for conduit wiring	ATM3	50/-

CHOKE CONDENSER FILTERS.

Single stage filter for use in mains lead of radio set or domestic appliance. 1, 2 or 3 amp. rating	66922	40/-
Two stage filter for use where Type 66922 is inadequate. 1, 2 or 3 amp. rating	69034	55/-

(State maximum current when ordering.)

NOTE.—Units rated for the greater currents are not to be recommended for use with lesser currents, since the filtering efficiency is then much lower.

SPARK SUPPRESSOR UNITS.

For buzzers, flashers, and other intermittent contacts. The unit is connected across the contacts	*CR3	6/-
This type incorporates a spark suppressor unit and condenser filter. Suitable for motors with associated thermostat switch, also for flashers where an additional mains filter may be found desirable	*CR1	10/-

*Fuses incorporated internally.

Electrical interference in radio reception is caused by many forms of electrical apparatus, both domestic and industrial.

Interference enters the receiver by one or more, or a combination of, the following ways :—

Conducted interference, which is mains borne, entering the receiver via the mains lead.

Mains radiated interference, which is mains borne, re-radiated from the house wiring and picked up by the aerial-earth system so entering the receiver.

Directly radiated interference, which is picked up by the aerial-earth system directly from the source.

Household apparatus, such as Refrigerators, Fans, Bells, Sewing Machine Motors, Electro-Medical and Massage apparatus, may all cause interference when operating.

In the event of interference being experienced, the first step should be to ascertain that the noise is not due to bad or dirty connections, faulty valves or components in the receiver, including the aerial-earth system.

In the event of difficulty the Post Office Authorities are prepared to assist, and a form for this purpose is obtainable at any ordinary Post Office.

Interference should preferably be dealt with at its source. Sometimes this is not possible or is inconvenient, and the next best course is to apply a suitable Anti-Interference Unit as near to the supply entry to the house as possible. This position is usually at the point where the house meter is situated. The appended list gives a selection of types of Anti-Interference Units which when chosen and fitted correctly have proved very efficacious. When fitting Anti-Interference devices, the leads between the Unit and the source of interference (or the main leads for house entry units) should be kept as short as possible.





DUBILIER CONDENSER CO. (1925) LTD.
DUCON WORKS, VICTORIA ROAD
NORTH ACTON, W.3

Stocked by—

August, 1934