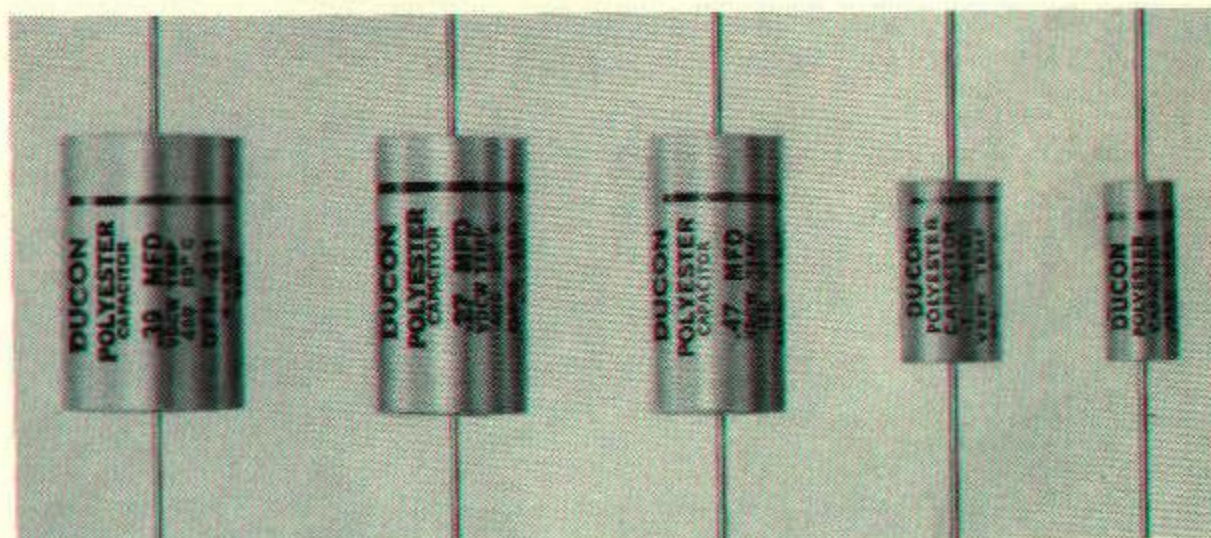




POLYESTER DIELECTRIC CAPACITORS TYPE DFM

125 VOLT 400 VOLT 630 VOLT WORKING
IN METAL CASE



In recent years there has taken place intensive research into materials suitable for dielectrics to replace the impregnated paper capacitor which, in its commonly accepted tubular form, has a number of limitations. Of the vast number of new materials available, POLY-ETHYLENE TEREPHTHALATE (Polyester) has outstanding characteristics for capacitor dielectric use. It has extremely high dielectric strength combined with non absorption of moisture, chemical inertness, and is capable of operation at high temperatures.

Due to the high dielectric strength very thin film can be used, resulting in a substantial volume reduction over equivalent paper capacitors. Polyester film has considerably lower dielectric losses and much higher insulation resistance, as shown by the characteristics of the completed capacitors.

Even though the moisture absorption of Polyester film is practically nil, Ducon have provided in Type DFM (axial lead) a further moisture barrier. This is done by inserting the winding in a metal tube, the ends being sealed with an epoxy resin.

This range of Ducon Polyester capacitors is designed to surpass both I.E.C. and Australian Standards Association Draft Specification covering Polyester capacitors for Direct Current operation.

They are particularly designed to conform to the Australian Post Office Draft Specification for Fixed Capacitors, Category (d) - polyester film. Because of the construction both temperature rating and insulation resistance have been upgraded. They are available in 125volt, 400volt and 630volt ratings, the standard tolerance being $\pm 10\%$.

SPECIFICATION

D.C. Working Voltage	125	400	630
D.C. Test Voltage 1 Min.	250	800	1260
A.C. Working Voltage 50 c/s	90	200	300
Outer Foil Termination	Indicated by Black Band		
Temperature Range	- 10°C to + 90°C without derating		
Power Factor at 1 Kc/s	1% Max.		
Capacitance Tolerance	$\pm 10\%$		
Insulation Resistance 20°C	$1 \times 10^5 M\Omega$ or 33000 second, whichever is the least		

(P.O. Box 2, Villawood, N.S.W.)

DUCON CONDENSER PTY. LTD.

(Phone 72 0133)

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6 Clarice Road, Box Hill South, Vic.
3084

Queensland:

P. H. Phillips Pty Ltd
458 Brunswick Street, Valley,
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South Australia:

Wm. T. Matthews Ltd
95 Grenfell Street, Adelaide, South Aust.
5001

Western Australia:

H. J. McQuillan Pty Ltd
1017 Wellington Street West,
Perth, W.A. 6001

New Zealand:

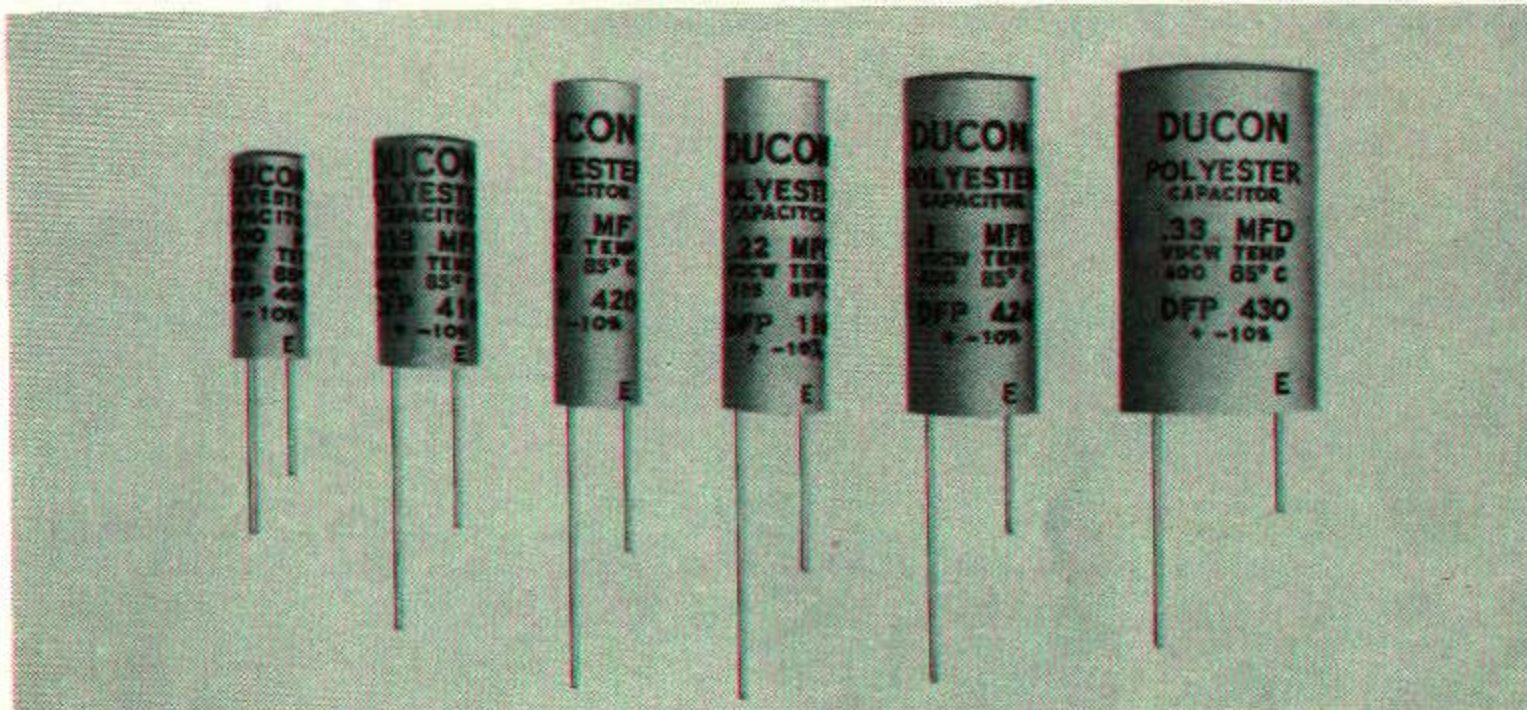
Ducon (NZ) Limited
PO Box 2630, Auckland,
New Zealand 1010



POLYESTER DIELECTRIC CAPACITORS

TYPE DFP

125 VOLT and 400 VOLT WORKING
FOR PRINTED CIRCUIT USE



In recent years there has taken place intensive research into materials suitable for dielectrics to replace the impregnated paper capacitor which, in its commonly accepted tubular form, has a number of limitations. Of the vast number of new materials available, POLY-ETHYLENE TEREPHTHALATE (Polyester) has outstanding characteristics for capacitor dielectric use. It has extremely high dielectric strength combined with non absorption of moisture, chemical inertness, and is capable of operation at high temperatures.

Due to the high dielectric strength, very thin film can be used, resulting in a substantial volume reduction over equivalent paper capacitors. Polyester film has considerably lower dielectric losses and much higher insulation resistance, as shown by the characteristics of the completed capacitors.

Even though the moisture absorption of Polyester film is practically nil, Ducon have provided in Type DFP vertical printed circuit mounting a further moisture barrier. This is done by inserting the winding in a rigid waterproof plastic tube, the ends being sealed with an epoxy resin.

This range of Ducon Polyester printed circuit capacitors, of extended foil or non inductive construction is designed to conform to the Australian Standards Association Draft Specification covering Polyester capacitors for Direct Current operation. The units meet climatic category 755 and are available in 125 volt, and 400 volt ratings. The standard tolerance is $\pm 10\%$. In addition the lead spacing follows the International Standard 0.1" grid.

SPECIFICATION

D.C. Working Voltage	125	400
D.C. Test Voltage 1 Min.	250	800
A.C. Working Voltage 50 c/s	90	200
Outer Foil Termination	Indicated by letter "E"	
Temperature Range	-10°C to $+85^{\circ}\text{C}$ without derating	
Power Factor at 1 Kc/s	1% Max.	
Capacitance Tolerance	$\pm 10\%$	
Insulation Resistance 20°C	$5 \times 10^4 \text{ M}\Omega$ or 16500 seconds, whichever is the least	

DUCON CONDENSER PTY. LTD.

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458 Brunswick Street, Valley,
Brisbane, Qld. (LW 2011)

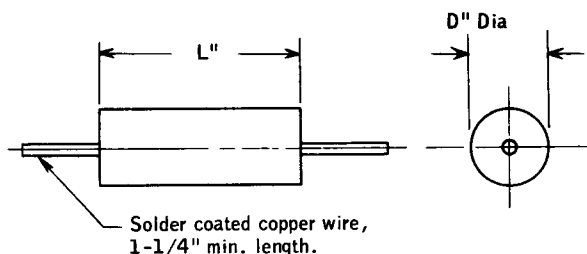
South Australia:
Wm. T. Matthews Ltd
95 Grenfell Street, Adelaide, South Aust.
(W 7021)

Western Australia:
H. J. McQuillan Pty Ltd
1017 Wellington Street West,
Perth, W.A. (21 8911)

New Zealand:
Ducon (NZ) Limited
PO Box 2630, Auckland, New
Zealand. (5205)

125V DC WORKING

Type No.	Capacitance	L"	Dia."	Lead Dia.
DFM 100	.01 μ F	15/16	5/16	.022"
DFM 101	.012 μ F	15/16	5/16	.022"
DFM 102	.015 μ F	15/16	5/16	.022"
DFM 103	.018 μ F	15/16	5/16	.022"
DFM 104	.022 μ F	15/16	5/16	.022"
DFM 105	.027 μ F	15/16	5/16	.022"
DFM 106	.033 μ F	15/16	3/8	.022"
DFM 107	.039 μ F	15/16	3/8	.022"
DFM 108	.047 μ F	15/16	3/8	.022"
DFM 109	.056 μ F	15/16	7/16	.022"
DFM 110	.068 μ F	15/16	7/16	.022"
DFM 111	.082 μ F	15/16	7/16	.022"
DFM 112	.1 μ F	15/16	1/2	.028"
DFM 113	.12 μ F	15/16	1/2	.028"
DFM 114	.15 μ F	15/16	9/16	.028"
DFM 115	.18 μ F	1-7/16	7/16	.028"
DFM 116	.22 μ F	1-7/16	7/16	.028"
DFM 117	.27 μ F	1-7/16	1/2	.028"
DFM 118	.33 μ F	1-7/16	1/2	.028"
DFM 119	.39 μ F	1-7/16	9/16	.028"
DFM 120	.47 μ F	1-7/16	21/32	.028"
DFM 121	.56 μ F	1-7/16	21/32	.028"
DFM 122	.68 μ F	1-7/16	25/32	.028"
DFM 123	.82 μ F	1-7/16	25/32	.028"
DFM 124	1.0 μ F	1-7/16	25/32	.028"

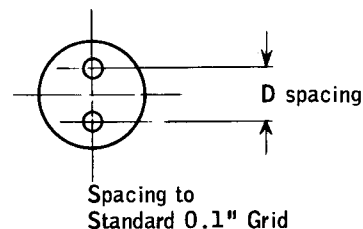
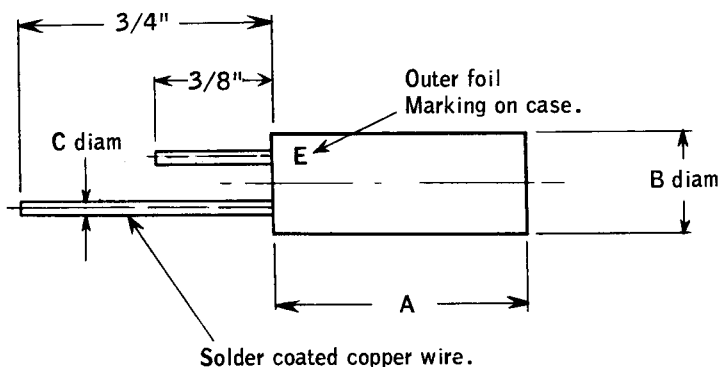


400V DC WORKING

Type No.	Capacitance	L"	Dia."	Lead Dia.
DFM 400	1000pF	15/16	5/16	.022"
DFM 401	1200pF	15/16	5/16	.022"
DFM 402	1500pF	15/16	5/16	.022"
DFM 403	1800pF	15/16	5/16	.022"
DFM 404	2200pF	15/16	5/16	.022"
DFM 405	2700pF	15/16	5/16	.022"
DFM 406	3300pF	15/16	5/16	.022"
DFM 407	3900pF	15/16	5/16	.022"
DFM 408	4700pF	15/16	5/16	.022"
DFM 409	5600pF	15/16	5/16	.022"
DFM 410	6800pF	15/16	5/16	.022"
DFM 411	8200pF	15/16	5/16	.022"
DFM 412	.01 μ F	15/16	5/16	.022"
DFM 413	.012 μ F	15/16	5/16	.022"
DFM 414	.015 μ F	15/16	3/8	.022"
DFM 415	.018 μ F	15/16	3/8	.022"
DFM 416	.022 μ F	15/16	7/16	.022"
DFM 417	.027 μ F	15/16	7/16	.022"
DFM 418	.033 μ F	15/16	7/16	.022"
DFM 419	.039 μ F	15/16	1/2	.028"
DFM 420	.047 μ F	15/16	1/2	.028"
DFM 421	.056 μ F	15/16	7/16	.028"
DFM 422	.068 μ F	1-7/16	7/16	.028"
DFM 423	.082 μ F	1-7/16	1/2	.028"
DFM 424	.1 μ F	1-7/16	1/2	.028"
DFM 425	.12 μ F	1-7/16	1/2	.028"
DFM 426	.15 μ F	1-7/16	9/16	.028"
DFM 427	.18 μ F	1-7/16	9/16	.028"
DFM 428	.22 μ F	1-7/16	21/32	.028"
DFM 429	.27 μ F	1-7/16	25/32	.028"
DFM 430	.33 μ F	1-7/16	25/32	.028"
DFM 431	.39 μ F	1-7/16	29/32	.028"
DFM 432	.47 μ F	1-7/16	29/32	.028"

630V DC WORKING

Type No.	Capacitance	Length"	Dia."	Lead Dia.
DFM 600	1000pF	15/16	5/16	.022"
DFM 601	1200pF	15/16	5/16	.022"
DFM 602	1500pF	15/16	5/16	.022"
DFM 603	1800pF	15/16	5/16	.022"
DFM 604	2200pF	15/16	5/16	.022"
DFM 605	2700pF	15/16	5/16	.022"
DFM 606	3300pF	15/16	5/16	.022"
DFM 607	3900pF	15/16	5/16	.022"
DFM 608	4700pF	15/16	5/16	.022"
DFM 609	5600pF	15/16	3/8	.022"
DFM 610	6800pF	15/16	3/8	.022"
DFM 611	8200pF	15/16	7/16	.022"
DFM 612	.01 μ F	15/16	7/16	.022"
DFM 613	.012 μ F	15/16	7/16	.022"
DFM 614	.015 μ F	15/16	1/2	.028"
DFM 615	.018 μ F	15/16	1/2	.028"
DFM 616	.022 μ F	15/16	1/2	.028"
DFM 617	.027 μ F	15/16	9/16	.028"
DFM 618	.033 μ F	15/16	21/32	.028"
DFM 619	.039 μ F	15/16	21/32	.028"
DFM 620	.047 μ F	1-7/16	1/2	.028"
DFM 621	.056 μ F	1-7/16	1/2	.028"
DFM 622	.068 μ F	1-7/16	9/16	.028"
DFM 623	.082 μ F	1-7/16	9/16	.028"
DFM 624	.1 μ F	1-7/16	21/32	.028"
DFM 625	.12 μ F	1-7/16	25/32	.028"
DFM 626	.15 μ F	1-7/16	25/32	.028"
DFM 627	.18 μ F	1-7/16	29/32	.028"
DFM 628	.22 μ F	1-7/16	29/32	.028"



125V. DC WORKING

Type No.	Capacitance	A	B	C	D
DFP 100	.01 μ F	1"	5/16"	.028"	.2"
DFP 101	.012 μ F	1"	5/16"	.028"	.2"
DFP 102	.015 μ F	1"	5/16"	.028"	.2"
DFP 103	.018 μ F	1"	5/16"	.028"	.2"
DFP 104	.022 μ F	1"	5/16"	.028"	.2"
DFP 105	.027 μ F	1"	5/16"	.028"	.2"
DFP 106	.033 μ F	1"	5/16"	.028"	.2"
DFP 107	.039 μ F	1"	5/16"	.028"	.2"
DFP 108	.047 μ F	1"	5/16"	.028"	.2"
DFP 109	.056 μ F	1"	3/8"	.028"	.2"
DFP 110	.068 μ F	1"	3/8"	.028"	.2"
DFP 111	.082 μ F	1"	3/8"	.028"	.2"
DFP 112	.1 μ F	1"	7/16"	.028"	.2"
DFP 113	.12 μ F	1"	1/2"	.036"	.3"
DFP 114	.15 μ F	1"	1/2"	.036"	.3"
DFP 115	.18 μ F	1"	19/32"	.036"	.3"
DFP 116	.22 μ F	1-1/2"	3/8"	.028"	.2"
DFP 117	.27 μ F	1-1/2"	7/16"	.028"	.2"
DFP 118	.33 μ F	1-1/2"	1/2"	.036"	.3"
DFP 119	.39 μ F	1-1/2"	1/2"	.036"	.3"
DFP 120	.47 μ F	1-1/2"	19/32"	.036"	.3"

400V. DC WORKING

Type No.	Capacitance	A	B	C	D
DFP 400	1000 pF	1"	5/16"	.028"	.2"
DFP 401	1200 pF	1"	5/16"	.028"	.2"
DFP 402	1500 pF	1"	5/16"	.028"	.2"
DFP 403	1800 pF	1"	5/16"	.028"	.2"
DFP 404	2200 pF	1"	5/16"	.028"	.2"
DFP 405	2700 pF	1"	5/16"	.028"	.2"
DFP 406	3300 pF	1"	5/16"	.028"	.2"
DFP 407	3900 pF	1"	5/16"	.028"	.2"
DFP 408	4700 pF	1"	5/16"	.028"	.2"
DFP 409	5600 pF	1"	5/16"	.028"	.2"
DFP 410	6800 pF	1"	5/16"	.028"	.2"
DFP 411	8200 pF	1"	5/16"	.028"	.2"
DFP 412	.01 μ F	1"	5/16"	.028"	.2"
DFP 413	.012 μ F	1"	5/16"	.028"	.2"
DFP 414	.015 μ F	1"	5/16"	.028"	.2"
DFP 415	.018 μ F	1"	3/8"	.028"	.2"
DFP 416	.022 μ F	1"	3/8"	.028"	.2"
DFP 417	.027 μ F	1"	3/8"	.028"	.2"
DFP 418	.033 μ F	1"	7/16"	.028"	.2"
DFP 419	.039 μ F	1-1/2"	3/8"	.028"	.2"
DFP 420	.047 μ F	1-1/2"	3/8"	.028"	.2"
DFP 421	.056 μ F	1-1/2"	3/8"	.028"	.2"
DFP 422	.068 μ F	1-1/2"	7/16"	.028"	.2"
DFP 423	.082 μ F	1-1/2"	7/16"	.028"	.2"
DFP 424	.1 μ F	1-1/2"	7/16"	.028"	.2"
DFP 425	.12 μ F	1-1/2"	1/2"	.036"	.3"
DFP 426	.15 μ F	1-1/2"	19/32"	.036"	.3"
DFP 427	.18 μ F	1-1/2"	19/32"	.036"	.3"
DFP 428	.22 μ F	1-1/2"	23/32"	.036"	.4"
DFP 429	.27 μ F	1-1/2"	23/32"	.036"	.4"
DFP 430	.33 μ F	1-1/2"	23/32"	.036"	.4"



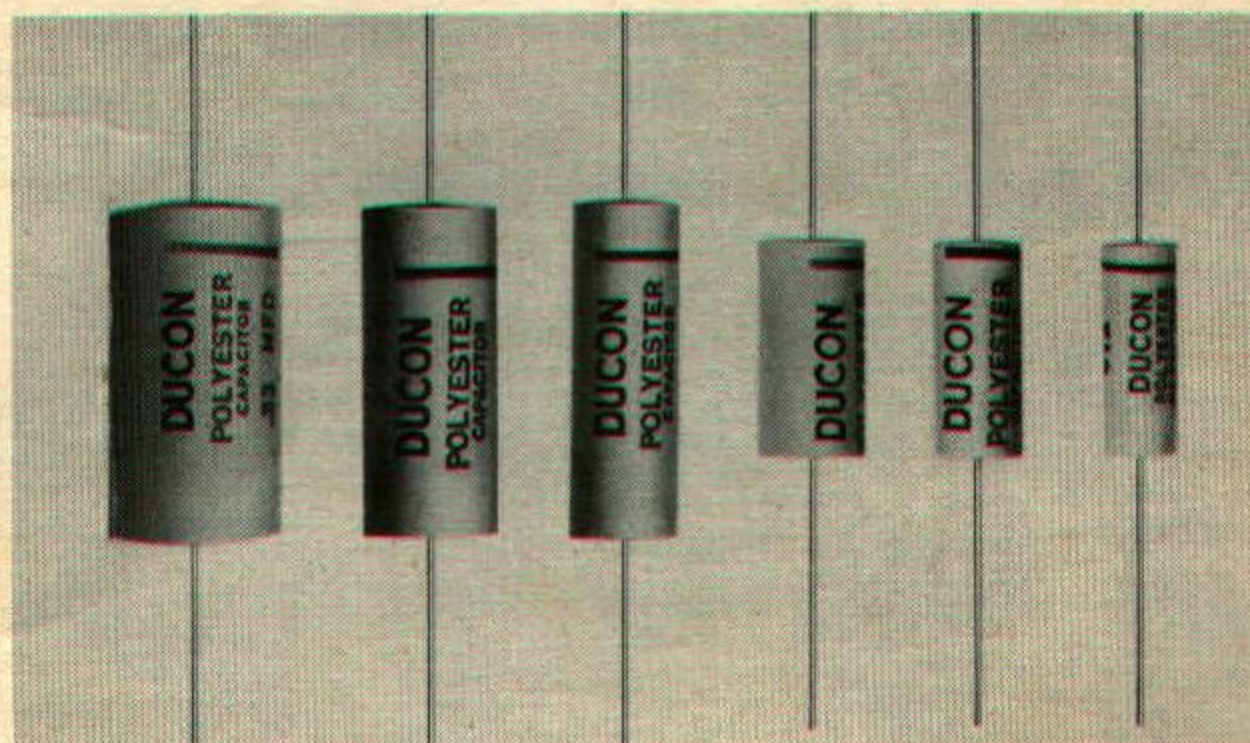
Engineering Bulletin

TENTATIVE
EB 603
MAY 1963
ISSUE 2

POLYESTER DIELECTRIC CAPACITORS

TYPE DFK

125 VOLT 400 VOLT 630 VOLT WORKING



In recent years there has taken place intensive research into materials suitable for dielectrics to replace the impregnated paper capacitor which, in its commonly accepted tubular form, has a number of limitations. Of the vast number of new materials available, POLY-ETHYLENE TEREPHTHALATE (Polyester) has outstanding characteristics for capacitor dielectric use. It has extremely high dielectric strength combined with non absorption of moisture, chemical inertness, and is capable of operation at high temperatures.

Due to the high dielectric strength, very thin film can be used, resulting in a substantial volume reduction over equivalent paper capacitors. Polyester film has considerably lower dielectric losses and much higher

insulation resistance, as shown by the characteristics of the completed capacitors.

Even though the moisture absorption of Polyester film is practically nil, Ducon have provided in Type DFK (axial lead) a further moisture barrier. This is done by inserting the winding in a rigid waterproof plastic tube, the ends being sealed with an epoxy resin.

This range of Ducon Polyester capacitors, of extended foil or non inductive construction, is designed to conform to the Australian Standards Association Draft Specification covering Polyester capacitors for Direct Current operation. The units meet climatic category 755 and are available in 125 volt, 400 volt and 630 volt ratings. The standard tolerance is $\pm 10\%$.

SPECIFICATION

D.C. Working Voltage	125	400	630
D.C. Test Voltage 1 Min.	250	800	1260
A.C. Working Voltage 50 c/s	90	200	300
Outer Foil Termination	Indicated by Black Band		
Temperature Range	-10°C to +85°C without derating		
Power Factor at 1 Kc/s	1% Max.		
Capacitance Tolerance	$\pm 10\%$		
Insulation Resistance 20°C	5 x 10 ⁴ M Ω or 16500 seconds, whichever is the least		

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458 Brunswick Street, Valley,
Brisbane, Qld. (1W 2011)

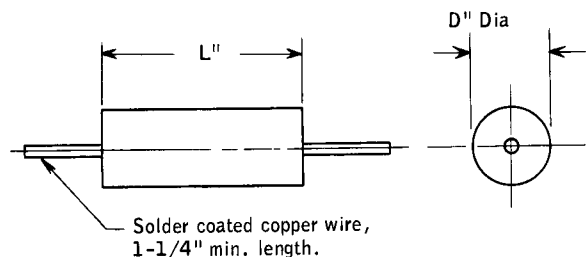
South Australia:
Wm. T. Matthews Ltd
95 Grenfell Street, Adelaide, South Aust.
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Western Australia:
H. J. McQuillan Pty Ltd
1017 Wellington Street West,
Perth, W.A. (21 8011)

New Zealand:
Ducon (NZ) Limited
PO Box 2630, Auckland, New
Zealand. (4205)

125V DC WORKING

Type No.	Capacitance	Length	Dia.	Lead Dia.
DFK 100	.01 μ F	15/16"	1/4"	.022"
DFK 101	.012 μ F	15/16"	1/4"	.022"
DFK 102	.015 μ F	15/16"	1/4"	.022"
DFK 103	.018 μ F	15/16"	1/4"	.022"
DFK 104	.022 μ F	15/16"	1/4"	.022"
DFK 105	.027 μ F	15/16"	1/4"	.022"
DFK 106	.033 μ F	15/16"	5/16"	.022"
DFK 107	.039 μ F	15/16"	5/16"	.022"
DFK 108	.047 μ F	15/16"	5/16"	.022"
DFK 109	.056 μ F	15/16"	3/8"	.022"
DFK 110	.068 μ F	15/16"	3/8"	.022"
DFK 111	.082 μ F	15/16"	3/8"	.022"
DFK 112	.1 μ F	15/16"	7/16"	.028"
DFK 113	.12 μ F	15/16"	7/16"	.028"
DFK 114	.15 μ F	15/16"	1/2"	.028"
DFK 115	.18 μ F	1-7/16"	3/8"	.028"
DFK 116	.22 μ F	1-7/16"	3/8"	.028"
DFK 117	.27 μ F	1-7/16"	7/16"	.028"
DFK 118	.33 μ F	1-7/16"	7/16"	.028"
DFK 119	.39 μ F	1-7/16"	1/2"	.028"
DFK 120	.47 μ F	1-7/16"	19/32"	.028"
DFK 121	.56 μ F	1-7/16"	19/32"	.028"
DFK 122	.68 μ F	1-7/16"	23/32"	.028"
DFK 123	.82 μ F	1-7/16"	23/32"	.028"
DFK 124	1.0 μ F	1-7/16"	23/32"	.028"



400V DC WORKING

Type No.	Capacitance	Length	Dia.	Lead Dia.
DFK 400	1000 pF	15/16"	1/4"	.022"
DFK 401	1200 pF	15/16"	1/4"	.022"
DFK 402	1500 pF	15/16"	1/4"	.022"
DFK 403	1800 pF	15/16"	1/4"	.022"
DFK 404	2200 pF	15/16"	1/4"	.022"
DFK 405	2700 pF	15/16"	1/4"	.022"
DFK 406	3300 pF	15/16"	1/4"	.022"
DFK 407	3900 pF	15/16"	1/4"	.022"
DFK 408	4700 pF	15/16"	1/4"	.022"
DFK 409	5600 pF	15/16"	1/4"	.022"
DFK 410	6800 pF	15/16"	1/4"	.022"
DFK 411	8200 pF	15/16"	1/4"	.022"
DFK 412	.01 μ F	15/16"	1/4"	.022"
DFK 413	.012 μ F	15/16"	1/4"	.022"
DFK 414	.015 μ F	15/16"	5/16"	.022"
DFK 415	.018 μ F	15/16"	5/16"	.022"
DFK 416	.022 μ F	15/16"	3/8"	.022"
DFK 417	.027 μ F	15/16"	3/8"	.022"
DFK 418	.033 μ F	15/16"	3/8"	.022"
DFK 419	.039 μ F	15/16"	7/16"	.028"
DFK 420	.047 μ F	15/16"	7/16"	.028"
DFK 421	.056 μ F	1-7/16"	3/8"	.028"
DFK 422	.068 μ F	1-7/16"	3/8"	.028"
DFK 423	.082 μ F	1-7/16"	7/16"	.028"
DFK 424	.1 μ F	1-7/16"	7/16"	.028"
DFK 425	.12 μ F	1-7/16"	7/16"	.028"
DFK 426	.15 μ F	1-7/16"	1/2"	.028"
DFK 427	.18 μ F	1-7/16"	1/2"	.028"
DFK 428	.22 μ F	1-7/16"	19/32"	.028"
DFK 429	.27 μ F	1-7/16"	23/32"	.028"
DFK 430	.33 μ F	1-7/16"	23/32"	.028"
DFK 431	.39 μ F	1-7/16"	27/32"	.028"
DFK 432	.47 μ F	1-7/16"	27/32"	.028"

630V DC WORKING

Type No.	Capacitance	Length	Dia.	Lead Dia.
DFK 600	1000 pF	15/16"	1/4"	.022"
DFK 601	1200 pF	15/16"	1/4"	.022"
DFK 602	1500 pF	15/16"	1/4"	.022"
DFK 603	1800 pF	15/16"	1/4"	.022"
DFK 604	2200 pF	15/16"	1/4"	.022"
DFK 605	2700 pF	15/16"	1/4"	.022"
DFK 606	3300 pF	15/16"	1/4"	.022"
DFK 607	3900 pF	15/16"	1/4"	.022"
DFK 608	4700 pF	15/16"	1/4"	.022"
DFK 609	5600 pF	15/16"	5/16"	.022"
DFK 610	6800 pF	15/16"	5/16"	.022"
DFK 611	8200 pF	15/16"	3/8"	.022"
DFK 612	.01 μ F	15/16"	3/8"	.022"
DFK 613	.012 μ F	15/16"	3/8"	.022"
DFK 614	.015 μ F	15/16"	7/16"	.028"
DFK 615	.018 μ F	15/16"	7/16"	.028"
DFK 616	.022 μ F	15/16"	7/16"	.028"
DFK 617	.027 μ F	15/16"	1/2"	.028"
DFK 618	.033 μ F	15/16"	19/32"	.028"
DFK 619	.039 μ F	15/16"	19/32"	.028"
DFK 620	.047 μ F	1-7/16"	7/16"	.028"
DFK 621	.056 μ F	1-7/16"	7/16"	.028"
DFK 622	.068 μ F	1-7/16"	1/2"	.028"
DFK 623	.082 μ F	1-7/16"	1/2"	.028"
DFK 624	.1 μ F	1-7/16"	19/32"	.028"
DFK 625	.12 μ F	1-7/16"	23/32"	.028"
DFK 626	.15 μ F	1-7/16"	23/32"	.028"
DFK 627	.18 μ F	1-7/16"	27/32"	.028"
DFK 628	.22 μ F	1-7/16"	27/32"	.028"