



Low Dissipation Factor Disc Capacitors

FEATURES

- Ideal for High Voltage Switching to 100 kHz
Low DF Minimizes Self Heating at High Frequencies.
Application Voltages: 500, 1000 and 1500 Vac.
Economical Alternative to Film Capacitors.

The 1DFO, 2DFO, and 3DFO Series are designed to operate up to 500, 1000, and 1500 V\_RMS, respectively. Their low dissipation factor (DF) and stable temperature characteristics are well suited for operation at elevated frequency.

1DFO SERIES - LOW DISSIPATION FACTOR

561C Series

Application Range: 500 Vrms; 1000 Vdc

Table with 7 columns: Value pF, Tol., Catalog Number, Temp Char., Diameter (in / mm), Thickness (in / mm), Lead Space (in / mm). Rows include various capacitor models like 1DF0Q10, 1DF0T10, etc.

Note 1

Power ratings are based on still air 60°C ambient with additional 30°C rise due to self heating. Thermal effects such as forced air cooling, component encapsulation or other heat-sinking techniques will alter ratings.

Note 3

APPLICATIONS:

- Fluorescent Ballasts
Industrial Electronic Systems
Switching Power Supplies
Snubber Networks

GENERAL SPECIFICATIONS

Table with 4 columns: Series, 1DFO, 2DFO, 3DFO. Rows include Application Voltage, Dielectric Strength, Dissipation Factor, Maximum Service Temperature, Power Rating, and Insulation Resistance.

2DFO SERIES - LOW DISSIPATION FACTOR

564C Series

Application Range: 1000 Vrms; 2000 Vdc

Table with 7 columns: Value pF, Tol., Catalog Number, Temp Char., Diameter (in / mm), Thickness (in / mm), Lead Space (in / mm). Rows include various capacitor models like 2DF0Q10, 2DF0T10, etc.

Note 2

For convenience, power rating charts are shown to 100 kHz. Higher frequency operation is permissible with appropriate derating.

Note 3

Consult factory for application suggestions.

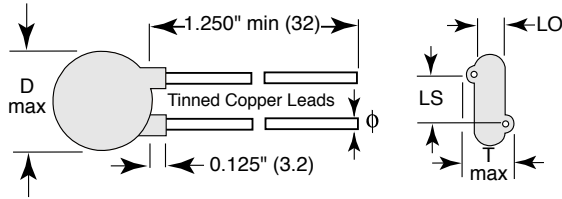
# 1DFO, 2DFO, 3DFO Series

Vishay Cera-Mite

Low Dissipation Factor Disc Capacitors



Fig 8



## WIRE LEAD INFORMATION

SERIES	Φ WIRE SIZE AWG / in / mm	"LO" TYP LEAD OFFSET in / mm
1DFO	22 .025 (.64)	.045 (1.2)
2DFO	20 .032 (.81)	.075 (1.8)
3DFO	20 .032 (.81)	.095 (2.4)

## 3DFO SERIES - LOW DISSIPATION FACTOR

564C Series

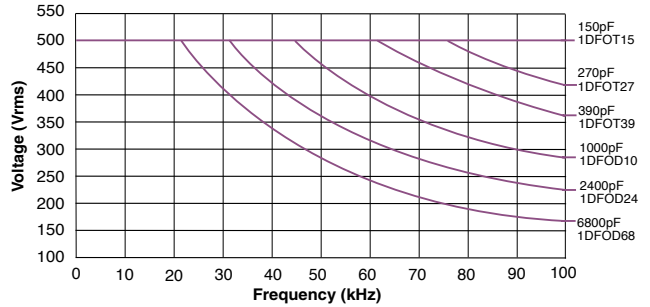
Application Range: 1500 Vrms, 3000 VDC

VALUE pF	TOL.	CATALOG NUMBER	TEMP CHAR.	D DIAMETER (in / mm)	T THICKNESS (in / mm)	LS LEAD SPACE (in / mm)
10	5%	3DF0Q10	N1500	.290 (7.4)	.185 (4.7)	.250 (6.4)
12	5%	3DF0Q12	N2200	.290 (7.4)	.210 (5.3)	.250 (6.4)
15	5%	3DF0Q15	N2200	.290 (7.4)	.185 (4.7)	.250 (6.4)
18	5%	3DF0Q18	N2200	.290 (7.4)	.185 (4.7)	.250 (6.4)
22	5%	3DF0Q22	N2200	.330 (8.4)	.210 (5.3)	.250 (6.4)
27	5%	3DF0Q27	N1500	.290 (7.4)	.220 (5.6)	.250 (6.4)
33	5%	3DF0Q33	N1500	.290 (7.4)	.195 (5.0)	.250 (6.4)
39	5%	3DF0Q39	N1500	.290 (7.4)	.190 (4.8)	.250 (6.4)
47	5%	3DF0Q47	N1500	.330 (8.4)	.225 (5.7)	.250 (6.4)
56	5%	3DF0Q56	N2000	.290 (7.4)	.210 (5.3)	.250 (6.4)
68	5%	3DF0Q68	N2000	.290 (7.4)	.190 (4.8)	.250 (6.4)
82	5%	3DF0Q82	N2000	.290 (7.4)	.185 (4.7)	.250 (6.4)
100	10%	3DF0T10	N2500	.290 (7.4)	.205 (5.2)	.250 (6.4)
120	10%	3DF0T12	N2500	.290 (7.4)	.190 (4.8)	.250 (6.4)
150	10%	3DF0T15	N2800	.290 (7.4)	.200 (5.1)	.250 (6.4)
180	10%	3DF0T18	N2800	.290 (7.4)	.190 (4.8)	.250 (6.4)
220	10%	3DF0T22	N2500	.330 (8.4)	.190 (4.8)	.250 (6.4)
270	10%	3DF0T27	N2800	.330 (8.4)	.205 (5.2)	.250 (6.4)
330	10%	3DF0T33	N2800	.330 (8.4)	.190 (4.8)	.250 (6.4)
390	10%	3DF0T39	N2800	.400 (10.2)	.215 (5.5)	.250 (6.4)
470	10%	3DF0T47	N2800	.400 (10.2)	.195 (5.0)	.250 (6.4)
560	10%	3DF0T56	N2800	.430 (10.9)	.200 (5.1)	.250 (6.4)
680	10%	3DF0T68	N2800	.460 (11.7)	.195 (5.0)	.250 (6.4)
820	10%	3DF0T82	N2800	.490 (12.5)	.195 (5.0)	.250 (6.4)
1000	10%	3DF0D10	N2800	.530 (13.5)	.190 (4.8)	.250 (6.4)
1200	10%	3DF0D12	N2800	.560 (14.2)	.190 (4.8)	.375 (9.5)
1500	10%	3DF0D15	N2800	.620 (15.8)	.190 (4.8)	.375 (9.5)
1800	10%	3DF0D18	N2800	.680 (17.3)	.190 (4.8)	.375 (9.5)
2200	10%	3DF0D22	N2800	.720 (18.3)	.190 (4.8)	.375 (9.5)
2300	10%	3DF0D23	N2800	.720 (18.3)	.190 (4.8)	.375 (9.5)
2400	10%	3DF0D24	N2800	.790 (20.1)	.195 (5.0)	.375 (9.5)
2500	10%	3DF0D25	N2800	.790 (20.1)	.195 (5.0)	.375 (9.5)
2700	10%	3DF0D27	N2800	.790 (20.1)	.190 (4.8)	.375 (9.5)
3300	10%	3DF0D33	N2800	.900 (22.9)	.200 (5.1)	.375 (9.5)
3900	10%	3DF0D39	N2800	.900 (22.9)	.190 (4.8)	.375 (9.5)
4700	10%	3DF0D47	N2800	.950 (24.1)	.185 (4.7)	.375 (9.5)

**Note 3**

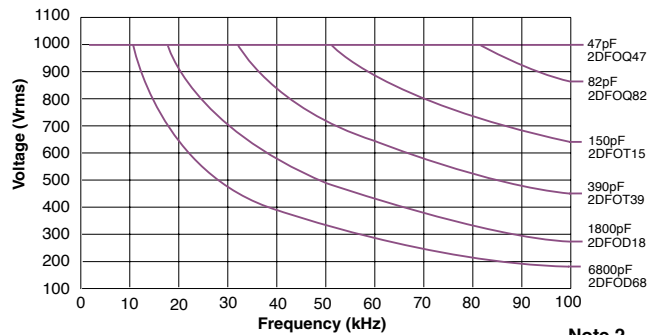
Alternate lead spacing of 5mm, 7.5mm, and 10mm are available bulk or tape & reel.

Power Rating - 1DFO Series 500 Vrms Low DF - Note 1



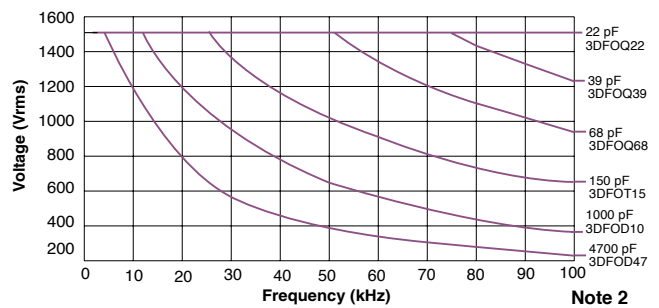
Note 2

Power Rating - 2DFO Series 1000 Vrms Low DF - Note 1



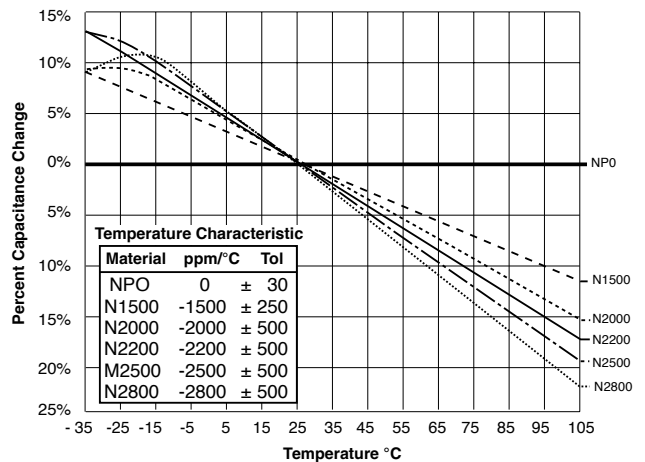
Note 2

Power Rating - 3DFO Series 1500 Vrms Low DF - Note 1



Note 2

Temperature Characteristics for 1DFO, 2DFO & 3DFO Series





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