

DC Feedthrough Capacitors - Class Y4

DFC Series



UL Pending
CSA Pending

DFC Series

The new DFC series features a range of DC feedthrough capacitors in current ratings from 10 to 300 amps. The DFC series is designed to meet the very stringent safety requirements of EN132400 class Y4 including the 2500V pulse test.

Capacitor Options / Specifications

Capacitor ID	Value (nF±20%)
C	10
G	47
H	100
N	470
P	1000
Q	3300
R	4700
T	8000



Specifications

Rated Voltage (max): 130 VDC
Rated Current: 10 to 300 amps
Test Voltage (two seconds): 2500 VDC
Capacitor Class (EN132400): Designed to meet Y4
Pulse Test (EN132400): 2500V Peak
Insulation Resistance (within 1 minute):
 For C < 0.33µF, R > 15000MΩ
 For C > 0.33µF, RC(MΩ*µF) > 5000s
Operating Ambient Temperature Range (@ rated current I_R):
 10 to 200 Amps: -40°C to +60°C
 250 & 300 Amps: -40°C to +40°C
Category Temperature Range: -40°C to +85°C
Climatic Category: 40/85/21
MTBF: Typically >10 million hours
Insulating Materials Flammability Rating: UL 94V-0

Typical insertion loss in dB:
Line-to-ground in 50 ohm circuit

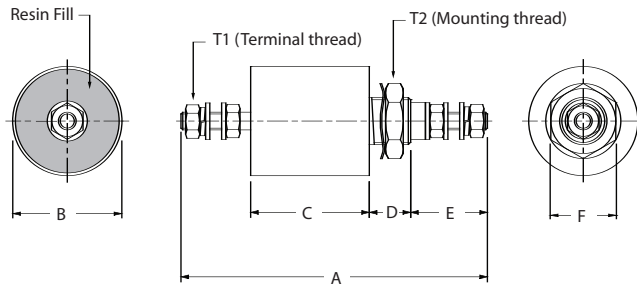
Cap ID	Frequency - MHz							
	0.01	0.03	0.1	0.3	1	10	100	1000
C	-	-	-	-	3	21	45	70
G	-	-	2	6	15	34	50	90
H	-	2	5	11	20	40	65	90
N	6	9	15	22	33	33	90	90
P	10	15	24	32	42	50	90	90
Q	13	21	31	42	50	58	90	90
R	18	26	36	45	52	70	90	90
T	22	31	41	52	62	82	90	90

Current derating above ambient:
 10-100 Amp: For temperature, $\theta I_{\theta} = I_R \frac{(85-\theta)}{25}$
 250 & 300 Amp: For temperature, $\theta I_{\theta} = I_R \frac{(85-\theta)}{45}$

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Case Style



T1 - Terminal Thread

Part Number(s)	Thread	Torque (in.-lb.)
10DFC6-C	M3	4
16DFC6-C, 16DFC6-G	M4	11
16DFC6-H, 16DFC6-N		
32DFC6-C, 32DFC6-G		
32DFC6-H, 32DFC6-N		
63DFC6-C, 63DFC6-G	M6	22
63DFC6-H, 63DFC6-N		
100DFC6-G, 100DFC6-H	M8	44
100DFC6-N, 100DFC6-P		
200DFC6-H, 200DFC6-N	M10	71
200DFC6-P, 200DFC6-R		
250DFC6-P, 250DFC6-Q	M12	97
250DFC6-T		
300DFC6-P, 300DFC6-Q	M16	177
300DFC6-T		

T2 - Mounting Thread

Part Number(s)	Thread	Torque (in.-lb.)
10DFC6-C	M10 x 1	27
16DFC6-C, 16DFC6-G	M12 x 1	35
16DFC6-H, 32DFC6-C		
32DFC6-G, 32DFC6-H		
63DFC6-C, 63DFC6-G	M16 x 1	62
63DFC6-H		
16DFC6-N, 32DFC6-N	M20 x 1	89
63DFC6-N, 100DFC6-G		
100DFC6-H, 100DFC6-N		
100DFC6-P, 200DFC6-H	M24 x 1	124
200DFC6-N, 200DFC6-P		
200DFC6-R	M27 x 1.5	142
250DFC6-P, 250DFC6-Q	M32 x 1.5	212
250DFC6-T, 300DFC6-P		
300DFC6-Q, 300DFC6-T		

Case Dimensions

Part No.	A	B	C	D	E	F
	±.04	±.02	±.04	±.04	±.08	
10DFC6-C	1	0.5	1	1	2	
16DFC6-C	2.24	0.59	0.71	0.39	0.63	0.51
16DFC6-G	2.48	0.79	0.71	0.47	0.71	0.67
16DFC6-H	2.95	.79	1.18	0.47	0.71	0.67
16DFC6-N	3.23	12.6	1.30	0.63	0.71	1.06
32DFC6-C	2.48	0.79	0.71	0.47	0.71	0.67
32DFC6-G	2.95	0.79	1.18	0.47	0.71	0.67
32DFC6-H	3.23	1.26	1.30	0.63	0.71	1.06
32DFC6-N	3.78	0.98	1.18	0.55	1.02	0.87
63DFC6-C	3.98	1.26	1.30	0.63	1.02	1.06
63DFC6-G	4.45	1.26	1.30	0.63	1.26	1.06
63DFC6-H	5.24	1.50	1.97	0.75	1.26	1.06
63DFC6-N	5.12	1.26	1.30	0.75	1.57	1.06
100DFC6-G	5.79	1.50	1.97	0.75	1.57	1.06
100DFC6-H	6.50	2.13	2.68	0.75	1.57	1.57
100DFC6-N	5.83	2.13	1.65	0.75	1.81	1.57
100DFC6-P	6.30	2.13	2.13	0.75	1.81	1.57
200DFC6-H	7.01	2.13	2.83	0.75	1.81	1.57
200DFC6-N	5.83	2.13	1.65	0.75	1.81	1.57
200DFC6-P	6.30	2.13	2.13	0.75	1.81	1.57
200DFC6-Q	7.01	2.13	2.83	0.75	1.81	1.57
200DFC6-R	5.83	2.13	1.65	0.75	1.81	1.57
250DFC6-P	6.30	2.13	2.13	0.75	1.81	1.57
250DFC6-Q	7.01	2.13	2.83	0.75	1.81	1.57
250DFC6-T	5.83	2.13	1.65	0.75	1.81	1.57
300DFC6-P	6.30	2.13	2.13	0.75	1.81	1.57
300DFC6-Q	7.01	2.13	2.83	0.75	1.81	1.57
300DFC6-T	5.83	2.13	1.65	0.75	1.81	1.57

Part Numbers

10DFC6-D	32DFC6-H	100DFC6-H	250DFC6-P
16DFC6-C	32DFC6-N	100DFC6-N	250DFC6-Q
16DFC6-G	63DFC6-C	100DFC6-P	250DFC6-T
16DFC6-H	63DFC6-G	200DFC6-H	300DFC6-P
16DFC6-N	63DFC6-H	200DFC6-K	300DFC6-Q
32DFC6-C	63DFC6-N	200DFC6-P	300DFC6-T
32DFC6-G	100DFC6-G	200DFC6-R	