ED : 2019. 12

Power Electronics Capacitors Guide

- Snubber Capacitors
- Conduction Cooled Power Capacitors
- DC Link Capacitors
- Capacitors for Medical Instruments
- Capacitors for Electrical Vehicles
- Capacitors for ESS(Energy Storage System)

DAEDONG CAPACITOR CO., LTD.

www.i-daedong.co.kr

HISTORY

2000' years

2019. 12	Capacitors for Medical Instruments DMF-M Series, CE Mark Certification. (TUV Mark)
2019. 06	A.C Motor Capacitors DMF Series, BIS Mark Certification.
2016. 01	Snubber Capacitor DMF-S series CE Mark Certification. (TUV Mark)
2015. 02	DC-Link Capacitor DAL-D series, UL Mark Certification.
2012. 08	DMR Series, P2 Type A-Class TUV, UL, C-UL Mark Certification.
2012. 08	DMF Series, P2 Type A-Class CQC Mark Certification (A-Class,The first time in Korea)
2012. 06	Established R & D Center.
2012. 06	Technology Innovation Small Businesses Innobiz recognized from Gov.
2011. 10	CLEAN Factory recognized.
2011. 05	ISO 9001:2008 Certification.
2010. 05	Factory & Production Facilities Expansion
2007. 02	Samsung Electronics Refrigerator AC Motor Capacitor start production. DMF Series, P2 Type
2006. 06	DMF Series, P2 Type A-Class TUV, UL, C-UL Mark Certification.
2000. 10	SQ Mark Certification HYUNDAI & KIA MOTORS.

1990' years

1999. 09	DMF Series TUV Mark Certification(P0 type).
1999. 04	Head office and factory expansion and relocation.
1998. 04	DMF Series VDE Mark Certification(P0 Type).
1997. 04	DAL Series UL Mark Certification(The first time in Korea).
1996. 11	DMF Series UL, C-UL Mark Certification.
1996. 06	DAL Series Fan Motor Capacitor start exports to Southeast Asia.
1995. 05	Daewoo Electronics for Refrigerator AC Motor Capacitor start production.

1970~1980' years

1988. 09	KS Mark Certification(KS C 4805, No.6299)
1988. 02	Renamed to DAEDONG CAPACITOR Co.,LTD.
1979. 06	Capacitor for Electrical Apparatus of production start.
1976. 06	HYUNDAI MOTORS, Noise Suppressor Capacitors mass product was set up.
1974. 01	Established DAEDONG ELECTRIC Co.,LTD

CONTENTS

Snubber Capacitors DMF-S Series

DC Link Capacitors Series ..... 20~26

Conduction Cooled Power Capacitors DHF-Series

Capacitors for Medical Instruments DMF-M Series

DAEDONG CAPACITOR CO., LTD.

DAEDONG CAPACITOR CO., LTD.

Snubber Capacitors

DMF-SA Series

Polypropylene Film Capacitor

■ Applications

Switching capacitor for resonant circuits, industrial and motor speed controls, induction heaters. High voltage, high current and high pulse applications such as :

- Snubber/ protection in semiconductor circuits
- Clamper in IGBT and MOSFET circuits

■ Characteristics

- Dielectric material : Polypropylene film, Self-healing Property
- Electrode material : Single side Metallized film
- Winding construction : Extended metallized polypropylene film with internal series connection
- Enclosure : Preformed UL 94 V-O plastic case with thermosetting
- Reference standard : IEC 61071

■ Specifications

Rated Voltage		VDC :550,00,850,1000,1200,1500,2000,2500,3000 VAC:340,420,500,575,630,650,700,725,750
Capacitance Range		0.068μF ~ 18.5μF
Capacitance Tolerance		J(±5%), K(±10%)
Operating temperature range		-40 ~ +85℃
Withstanding voltage	Between terminals	Rated Voltagex1.6Vdc, 10sec
	Between terminal to case	Rated Voltagex2+1000Vac, at 60Hz for 60sec
Insulation resistance	Between terminals	DC 500V, 1minute, at 25℃ C≤0.33MFD(≥100,000MΩ), C > 0.33MFD(≥30,000MΩ)
Dissipation factor		≤0.0005 at 1KHz and 25℃

■ Drawing

Rated Voltage (VDC) : 550VDC~ 3000VDC
Rated Capacitance (μF) : 0.068μF ~ 18.5μF

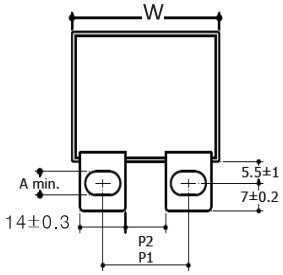


Fig1)Terminal F

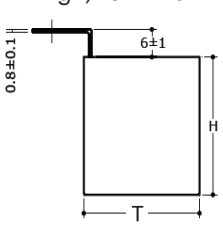
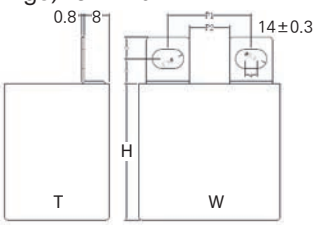


Fig3)Terminal B



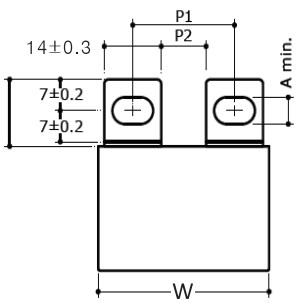
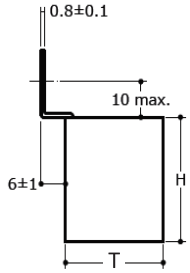


Fig2)Terminal G



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* Option : Case, terminal spacing, change adjustable.

Type	Case Dimension(mm)				
	W	T	H	P1	P2
F1	38	16	25	-	-
F2	45	20	32	25.0	11
F3	46	24	34	27.0	13
F4	46	33	44	27.0	13
F5	54	40	50	28.0	14
F6	58	35	50	28.0	14

* Type : Terminal(F,G,H,I,J,K----), ex)F3:Terminal F or G,B, Case 3

Snubber Capacitors

DMF-SA Series

Polypropylene Film Capacitor

■ Dimension Table : Nominal Values

Working Voltage 550 VDC (340 VAC)

Rated Capacitance μF	Dimension (mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
2	46	24	34	27	13	110	220	13	4,3	F,G
2.2	46	24	34	27	13	110	242	13.5	4,1	F,G
2.5	46	24	34	27	13	110	275	15	3,8	F,G
3	46	24	34	27	13	110	330	16.5	3,2	F,G
3.3	46	24	34	27	13	110	363	17.5	3,1	F,G
3.9	46	24	34	27	13	110	429	19	2,7	F,G
4.7	46	33	44	27	13	110	517	22.5	2,3	F,G
5	46	33	44	27	13	110	550	23	2,3	F,G
5.6	46	33	44	27	13	110	610	24.5	2,1	F,G
6.8	46	33	44	27	13	110	748	29.5	1,9	F,G
7.5	46	33	44	27	13	110	825	31	1,8	F,G
10	46	33	44	27	13	72	720	29	2,1	F,G
13	54	40	50	28	14	72	936	33	1,9	F,G
15	54	40	50	28	14	72	1080	34.5	1,7	F,G
18.5	54	40	50	28	14	72	1332	38	1,6	F,G

Working Voltage 700 VDC (420 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
1.5	46	24	34	27	13	150	225	15	3,5	F,G
2	46	24	34	27	13	150	300	17.5	3,1	F,G
2.2	46	24	34	27	13	150	330	18	3	F,G
2.5	46	24	34	27	13	150	375	20	2,6	F,G
3	46	24	34	27	13	150	450	22.5	2,6	F,G
3.3	46	33	44	27	13	150	495	23	2,5	F,G
4	46	33	44	27	13	150	600	24	2,1	F,G
4,7	46	33	44	27	13	150	600	29.5	1,7	F,G
5	46	33	44	27	13	150	750	30.5	1,7	F,G
5.6	46	33	44	27	13	150	840	32.5	1,6	F,G
6.8	54	40	50	28	14	100	680	29	2,2	F,G
9	54	40	50	28	14	100	900	34	1,8	F,G
10	54	40	50	28	14	100	1000	35.5	1,9	F,G
12	54	40	50	28	14	100	1200	37	1,7	F,G

Working Voltage 850 VDC (500 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
1	46	24	34	27	13	200	200	14.5	3,6	F,G
1.2	46	24	34	27	13	200	240	16.5	3,2	F,G
1.5	46	24	34	27	13	200	300	18.5	2,6	F,G
1.5	46	24	34	10	42(P)	200	300	18.5	2,6	Wire 2-pin(1.2Φ)

DAEDONG CAPACITOR CO., LTD.

Snubber Capacitors

DMF-SA Series

Polypropylene Film Capacitor

Working Voltage 850 VDC (500 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
2.2	46	33	44	27	13	200	440	25	2,2	F,G
2.5	46	33	44	27	13	200	500	26	2	F,G
2.7	46	33	44	27	13	200	540	26.5	2	F,G
3	46	33	44	27	13	200	600	30	1,7	F,G
3.3	46	33	44	27	13	200	660	30.5	1,7	F,G
4	46	33	44	27	13	200	800	32	1,6	F,G
4.7	54	40	50	28	14	110	517	29	2,0	F,G
5	54	40	50	28	14	110	550	29.5	2,0	F,G
5.6	54	40	50	28	14	110	616	33	1,9	F,G
6	54	40	50	28	14	110	693	34	1,9	F,G
6.8	54	40	50	28	14	110	748	35	1,8	F,G
8	54	40	50	28	14	110	880	36.5	1,7	F,G

Working Voltage 1000 VDC (575 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
0,68	46	24	34	27	13	225	153	14	4.0	F,G
1	46	24	34	27	13	225	225	17	3.2	F,G
1.2	46	24	34	27	13	225	270	18,5	2.9	F,G
1.5	46	33	44	27	13	225	337,5	23	2.5	F,G
2	46	33	44	27	13	225	450	25.5	2.5	F,G
2	46	33	44	27	13	225	450	27	2.5	F,G
2.2	46	33	44	27	13	225	495	28.5	1.9	F,G
2.5	46	33	44	27	13	225	562,5	30.5	1.8	F,G
3	54	40	50	28	14	135	405	28.5	2.2	F,G
3.3	54	40	50	28	14	135	445,5	29	2.2	F,G
4	54	40	50	28	14	135	540	31	2.2	F,G
4.7	54	40	50	28	14	135	634,5	33.5	1.8	F,G
5.6	54	40	50	28	14	135	756	35	1.7	F,G
6	54	40	50	28	14	135	810	36	1.7	F,G

Working Voltage 1200 VDC (630 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
0.47	46	24	34	27	13	225	119,8	12.5	4,9	F,G
0.68	46	24	34	27	13	225	173	15	4,1	F,G
1	46	33	44	27	13	255	255	19.5	3,2	F,G
1.2	46	33	44	27	13	255	306	22	2,8	F,G
1.5	46	33	44	27	13	255	382	24	2,4	F,G
2	46	33	44	27	13	255	510	28.5	1,9	F,G
2.2	46	33	44	27	13	255	561	29.5	1,8	F,G
2.5	54	40	50	28	14	150	375	28.5	2,4	F,G

Snubber Capacitors

DAEDONG CAPACITOR CO., LTD.

DMF-SA Series

Polypropylene Film Capacitor

Working Voltage 1200 VDC (630 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
3	54	40	50	28	14	150	450	32	2,0	F,G
3.3	54	40	50	28	14	150	495	32.5	2,0	F,G
4	54	40	50	28	14	150	600	34	1,9	F,G
4.7	54	40	50	28	14	150	705	35.5	1,7	F,G

Working Voltage 1500 VDC (650 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
0.15	46	24	34	27	13	320	48	5.4	6.7	F,G
0.22	46	24	34	27	13	320	70.4	10.5	5.9	F,G
0.33	46	24	34	27	13	320	105,6	12	5,3	F,G
0.47	46	24	34	27	13	320	150,4	14,5	4,3	F,G
0.68	46	33	44	27	13	320	217,6	18,5	3,6	F,G
1	46	33	44	27	13	320	320	23,5	2,5	F,G
1.2	46	33	44	27	13	320	384	27,5	2,1	F,G
1.3	46	33	44	27	13	320	416	28,5	2,1	F,G
1.5	54	40	50	28	14	175	262,5	25	3,0	F,G
2	54	40	50	28	14	175	350	29	2,5	F,G
2.2	54	40	50	28	14	175	385	29,5	2,4	F,G
3	54	40	50	28	14	175	525	34	2	F,G

Working Voltage 2000 VDC (700 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
0.22	46	24	34	27	13	410	90,2	11,5	6,4	F,G
0.27	46	24	34	27	13	410	110,7	13	5,6	F,G
0.33	46	24	34	27	13	410	135,3	14	4,6	F,G
0.47	46	33	44	27	13	410	192,7	19	3,7	F,G
0.56	46	33	44	27	13	410	229,6	21	3,3	F,G
0.68	46	33	44	27	13	410	278,8	23,5	2,9	F,G
0.82	45	33	44	27	13	410	336,2	25,5	2,6	F,G
1	54	40	50	28	14	225	225	23	3,5	F,G
1.5	54	40	50	28	14	225	337,5	27,5	2,7	F,G
2	54	40	50	28	14	225	450	32	2,2	F,G

Working Voltage 2500 VDC (725 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
0.1	46	24	34	27	13	550	55	8	11,7	F,G
0.12	46	24	34	27	13	550	66	9	10,1	F,G
0.15	46	24	34	27	13	550	82,5	10	8,3	F,G

DAEDONG CAPACITOR CO., LTD.

Snubber Capacitors

DMF-SA Series

Polypropylene Film Capacitor

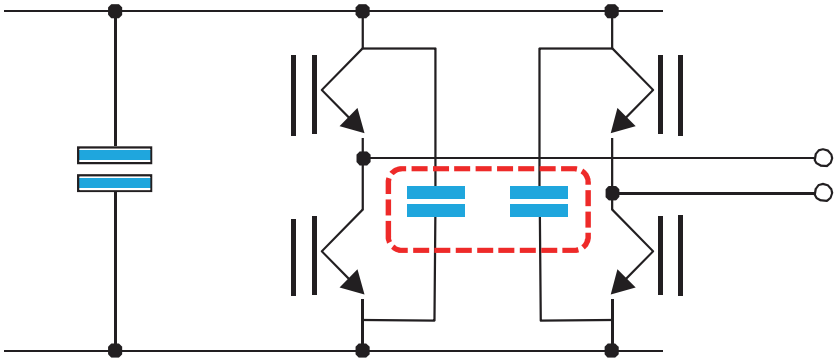
Working Voltage 2500 VDC (725 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
0.18	46	24	34	27	13	550	99	11,5	7,2	F,G
0.22	46	24	34	27	13	550	121	13,5	6,0	F,G
0.33	46	33	44	27	13	550	181,5	17,5	4,4	F,G
0.39	46	33	44	27	13	550	214,5	18,5	3,9	F,G
0.47	46	33	44	27	13	550	258,5	22	3,4	F,G
0.56	46	33	44	27	13	550	308	23	3,1	F,G
0.68	54	40	50	28	14	280	190,4	22,5	3,8	F,G
1	54	40	50	28	14	280	280	26,5	2,9	F,G
1.2	54	40	50	28	14	280	330	29,5	2,7	F,G

Working Voltage 3000 VDC (750 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
0.068	46	24	34	27	13	750	51	8	14,5	F,G
0.1	46	24	34	27	13	750	75	10	9,9	F,G
0.12	46	24	34	27	13	750	90	11	8,8	F,G
0.15	46	33	44	27	13	750	112,5	13,5	7,3	F,G
0.18	46	33	44	27	13	750	135	15	6,3	F,G
0.22	46	33	44	27	13	750	165	17,5	5,3	F,G
0.3	46	33	44	27	13	750	225	20,5	4,2	F,G
0.39	54	40	50	28	14	370	144,3	19	5,2	F,G
0.47	54	40	50	28	14	370	173,9	21,5	4,6	F,G
0.56	54	40	50	28	14	370	207,2	23	4,1	F,G
0.68	54	40	50	28	14	370	251,6	27	3,5	F,G

■ IGBT Snubber Capacitor

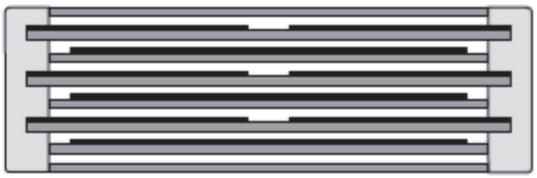


Snubber Capacitors

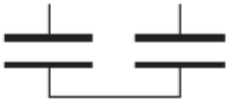
DMF-SA Series

Polypropylene Film Capacitor

■ Element Costruction



Extended metallized film design
with internal series connection
(series connection of 2 elements)



Single side metallized film
(dielectric+electrodes)

Sprayed metal head contact

■ Wire-type Drawing

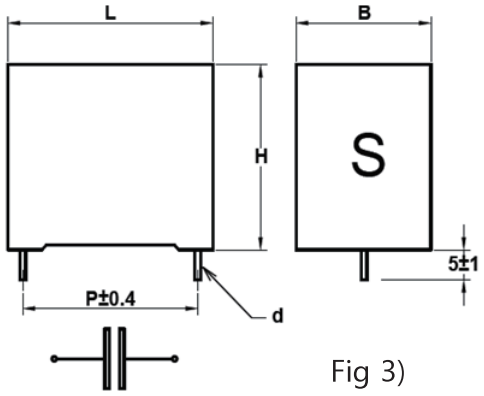


Fig 3)

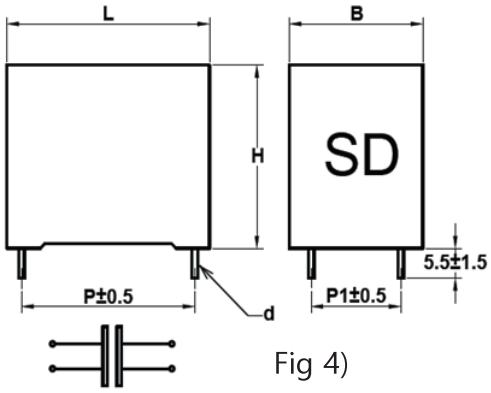


Fig 4)

Snubber Capacitors

DMF-SB Series

DAEDONG CAPACITOR CO., LTD.

Polypropylene Film Capacitor

■ Applications

Snubber capacitor for energy conversion and control in power electronics. High voltage, high current and high pulse applications such as :

- IGBT protection circuits, Snubber networks
- High DV/DT, Low/High frequency tuning circuits

■ Characteristics

- Dielectric material : Polypropylene film
- Electrode material : Aluminium foil
- Winding construction : Non-inductive extended foil(Low Inductance), impregnated
- Enclosure : Preformed UL 94 V-O plastic case with thermosetting

■ Specifications

Rated Voltage		VDC : 1000, 1250, 1500, 2000VDC
		VAC : 480, 550, 630, 750VAC
Capacitance Range		0.1μF ~ 3μF
Capacitance Tolerance		J(±5%), K(±10%)
Operating temperature range		-40 ~ +85℃
Withstanding voltage	Between terminals	Rated Voltagex2.0Vdc, 10sec
	Between terminal to case	3000Vac at 60Hz for 60sec
Insulation resistance	Between terminal to case	DC 500V, 1minute, at 25℃ C≤0.33MFD(≥100,000MΩ), C > 0.33MFD(≥30,000MΩ)
Dissipation factor		≤0.0005 at 1KHz and 25℃

■ Drawing

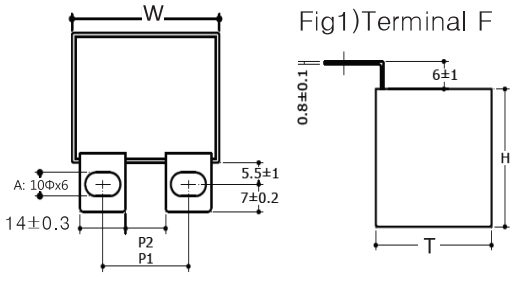


Fig1)Terminal F

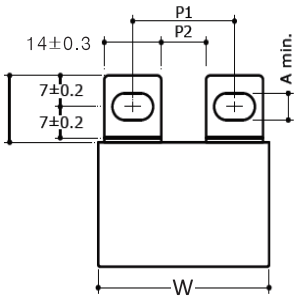
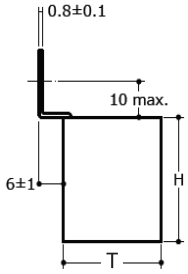


Fig2)Terminal G



Rated Voltage (VDC)	Rated Capacitance (μF)	Type	Dimension(mm)				
			W	T	H	P1	P2
1000 ~ 2000	0.1 ~ 3.0	F1	36	16	25	22.0	-
		F2	45	20	32	25.0	11
		F3	46	24	34	27.0	13
		F4	46	33	44	27.0	13
		F5	54	40	50	28.0	14
		F6	58	35	50	28.0	14

* Type : Terminal(F,G,H,I,J,K----), ex)F3:Terminal F, Case 3

Snubber Capacitors

DMF-SB Series

Polypropylene Film Capacitor

■ Dimension Table : Nominal values

Working Voltage 1000 VDC (480 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
0.100	32	14	24	22.3	-	900	90	5.6	14.2	F,G
0.150	32	14	24	22.3	-	900	135	5.7	13.8	F,G
0.220	32	14	24	22.3	-	900	198	6.8	13.4	F,G
0.220	41.5	17	29	27	11.5	900	198	18.2	7.2	F,G
0.220	38	18	33	27	8.5	900	198	18.2	7.2	F,G
0.270	41.5	17	29	27	11.5	900	243	18.7	7	F,G
0.270	38	18	33	27	8.5	900	243	18.7	7	F,G
0.330	41.5	17	29	27	11.5	900	297	19.7	6.7	F,G
0.330	38	18	33	27	8.5	900	297	19.7	6.7	F,G
0.390	41.5	17	29	27	11.5	900	351	20.6	6.7	F,G
0.390	38	18	33	27	8.5	900	351	20.6	6.5	F,G
0.470	46	24	34	27	13	900	423	21.1	6.5	F,G
0.560	46	24	34	27	13	800	392	21.3	6.5	F,G
0.680	46	24	34	27	13	800	476	21.3	6.2	F,G
0.750	46	24	34	27	13	800	525	25.6	6	F,G
0.820	46	24	34	27	13	800	574	26	6	F,G
1.000	46	24	34	27	13	900	900	26	6	F,G
1.000	46	33	44	27	13	800	900	26	6	F,G
1.200	46	33	44	27	13	800	960	26	5.5	F,G
1.500	46	33	44	27	13	800	1200	26	5.5	F,G
1.750	54	40	50	28	14	500	875	28	5.5	F,G
2.000	54	30	50	28	14	500	1000	28.2	5.5	F,G
2.200	54	40	50	28	14	400	880	28.5	5.4	F,G
2.500	54	40	50	28	14	400	1000	29	5.2	F,G
3.000	54	40	50	28	14	400	1200	30	5	F,G

Working Voltage 1250 VDC (550 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
0.100	32	14	24	22.3	-	1000	100	5.6	14.2	F,G
0.150	32	14	24	22.3	-	1000	150	5.7	13.8	F,G
0.220	32	14	24	22.3	-	1000	220	6.8	13.4	F,G
0.220	41.5	17	29	27	11.5	1000	220	18.2	7.2	F,G
0.220	38	18	33	27	8.5	1000	220	18.2	7.2	F,G
0.270	41.5	17	29	27	11.5	1000	270	18.7	7	F,G
0.270	38	18	33	27	8.5	1000	270	18.7	7	F,G
0.330	41.5	17	29	27	11.5	1000	330	19.7	6.7	F,G
0.330	38	18	33	27	8.5	1000	330	19.7	6.7	F,G
0.390	41.5	17	29	28.3	11.5	1000	390	20.6	6.7	F,G
0.390	38	18	33	27	8.5	1000	390	20.6	6.5	F,G
0.470	46	24	34	27	13	1000	470	21.1	6.5	F,G
0.560	46	24	34	27	13	1000	560	21.3	6.5	F,G
0.680	46	24	34	27	13	900	612	21.3	6.2	F,G
0.750	46	24	34	27	13	900	675	25.6	6	F,G
0.820	46	24	34	27	13	900	738	26	6	F,G
1.000	46	24	34	27	13	900	900	26	6	F,G
1.000	46	33	44	27	13	1000	1000	26	6	F,G
1.200	46	33	44	27	13	900	1080	26	5.5	F,G

DAEDONG CAPACITOR CO., LTD.

Snubber Capacitors

DMF-SB Series

Polypropylene Film Capacitor

Working Voltage 1250 VDC (550 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
1.500	46	33	44	27	13	900	1350	26	5.5	F,G
1.750	54	40	50	28	14	600	1050	28	5.5	F,G
2.000	54	40	50	28	14	600	1100	28.2	5.5	F,G
2.200	54	40	50	28	14	500	880	28.5	5.4	F,G
2.500	54	40	50	28	14	500	1250	29	5.2	F,G
3.000	54	40	50	28	14	500	1500	30	5	F,G

Working Voltage 1500 VDC (630 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
0.1	32	14	24	22.3	-	1100	110	5.6	14.2	F,G
0.15	32	14	24	22.3	-	1100	165	5.7	13.8	F,G
0.22	38	18	33	27	8.5	1100	242	6.8	13.4	F,G
0.22	41.5	17	29	27	11.5	1100	242	18.2	7.2	F,G
0.22	38	18	33	27	8.5	1100	242	18.2	7.2	F,G
0.27	41.5	17	29	27	11.5	1100	297	18.7	7	F,G
0.27	38	18	33	27	8.5	1100	297	18.7	7	F,G
0.33	41.5	17	29	27	11.5	1100	363	19.7	6.7	F,G
0.33	38	18	33	27	8.5	1100	363	19.7	6.7	F,G
0.39	41.5	17	29	27	11.5	1100	429	20.6	6.7	F,G
0.39	38	18	33	27	8.5	1100	429	20.6	6.5	F,G
0.47	46	24	34	27	13	1100	517	21.1	6.5	F,G
0.56	46	24	34	27	13	1000	560	21.3	6.5	F,G
0.68	46	24	34	27	13	1000	680	21.3	6.2	F,G
0.75	46	24	34	27	13	1000	750	25.6	6	F,G
0.82	46	24	34	27	13	1000	820	26	6	F,G
1	46	33	44	27	13	1000	1000	26	6	F,G
1.2	46	33	44	27	13	1000	1200	26	5.5	F,G
1.5	46	33	44	27	13	1000	1500	26	5.5	F,G
1.75	54	40	50	28	14	700	1225	28	5.5	F,G
2	54	40	50	28	14	700	1400	28.2	5.5	F,G
2.2	54	40	50	28	14	600	1320	28.5	5.4	F,G
2.5	54	40	50	28	14	600	1500	29	5.2	F,G
3	54	40	50	28	14	600	1800	30	5	F,G

Working Voltage 2000 VDC (750 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
0.1	41.5	17	29	27	11.5	1300	130	13.2	11.4	F,G
0.15	46	24	34	27	13	1200	180	15.11	10	F,G
0.22	46	24	34	27	13	1200	264	19.8	7.5	F,G
0.27	46	24	34	27	13	1200	324	21.7	7.3	F,G
0.33	46	33	44	27	13	1200	396	22.2	7.1	F,G
0.39	46	33	44	27	13	1200	468	22.5	7	F,G
0.47	46	33	44	27	13	1200	564	22.5	7	F,G
0.56	54	40	50	28	14	1000	560	22.7	6.8	F,G

DAEDONG CAPACITOR CO., LTD.

Snubber Capacitors

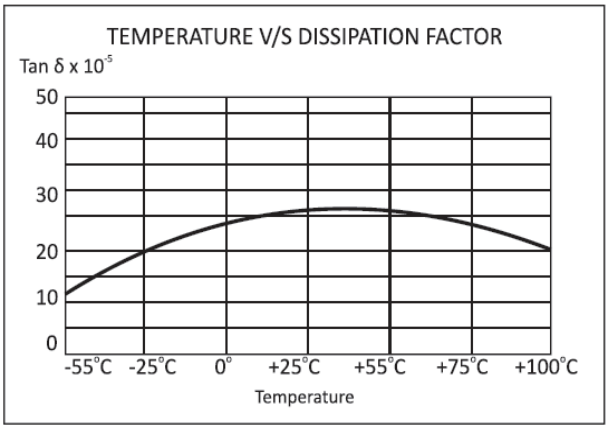
DMF-SB Series

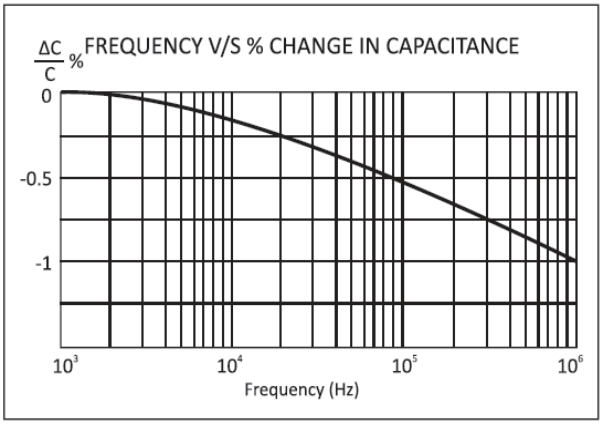
Polypropylene Film Capacitor

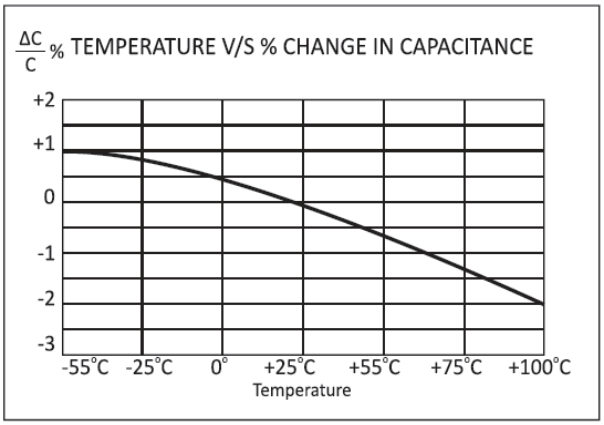
Working Voltage 2000 VDC (750 VAC)

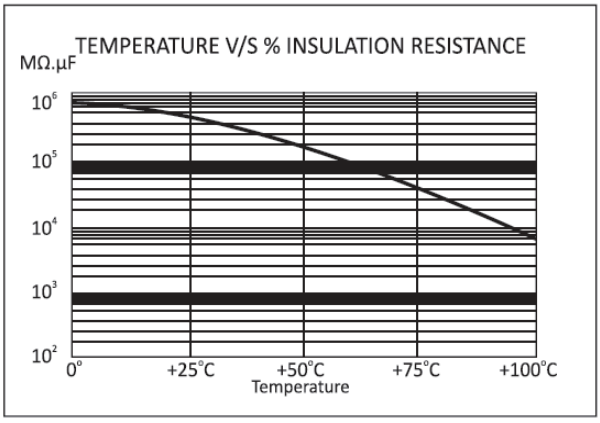
Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
0.68	54	40	50	28	14	1000	680	22.8	6.7	F,G
0.75	54	40	50	28	14	800	600	23.2	6.4	F,G
0.82	54	40	50	28	14	800	656	23.2	6.3	F,G
1	54	40	50	28	14	800	800	23.3	6.2	F,G

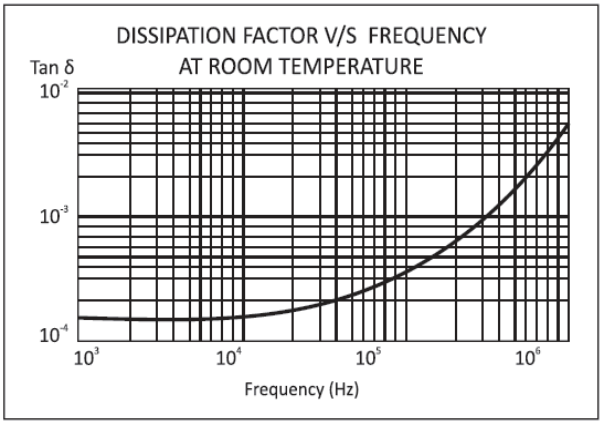
■ Typical Performance Curves



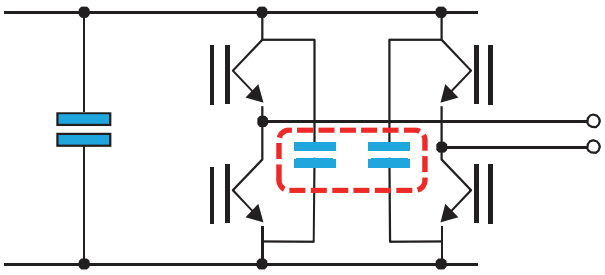








■ IGBT SNUBBER Capacitor

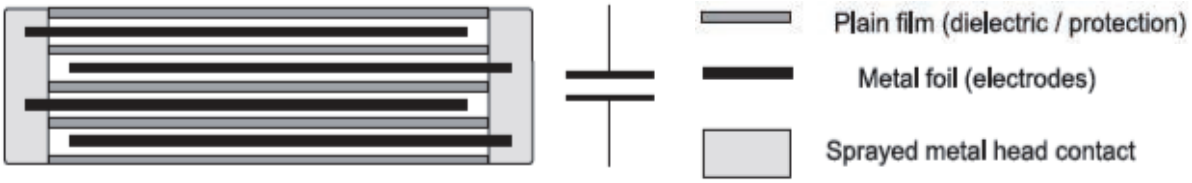


Snubber Capacitors

DMF-SB Series

Polypropylene Film Capacitor

■ Element Costruction



Extended foil design

Snubber Capacitors

DAEDONG CAPACITOR CO., LTD.

DMF-SC Series

Polypropylene Film Capacitor

■ Applications

Snubber capacitor for energy conversion and control in power electronics. High voltage, high current and high pulse applications such as :

- IGBT protection circuits, Snubber networks
- Protection circuits in SMPS

■ Characteristics

- Dielectric material : Polypropylene film, Self-healing Property
- Electrode material : Aluminium foil and PP film/MPP film.
- Winding construction : Non-inductive extended foil(Low Inductance),Polypropylene film, alumium foil plus metallised polypropylene film wound in a series connection.
- Enclosure : Preformed UL 94 V-O plastic case with thermosetting
- Reference standard : IEC 61071

■ Specifications

Rated Voltage		VDC : 1000, 1250, 1500, 2000, 3000VDC VAC : 480, 550, 630, 700, 750VAC
Capacitance Range		0.1μF ~ 3.3μF
Capacitance Tolerance		J(±5%), K(±10%)
Operating temperature range		-40 ~ +85℃
Withstanding voltage	Between terminals	Rated Voltagex1.6Vdc, 10sec
	Between terminal to case	Rated Voltagex2+1000Vac, at 60Hz for 60sec
Insulation resistance	Between terminals	DC 500V, 1minute, at 25℃ C≤0.33MFD(≥100,000MΩ), C > 0.33MFD(≥30,000MΩ)
Dissipation factor		≤0.0005 at 1KHz and 25℃

■ Drawing

Rated Voltage (VDC) : 1000VDC~ 3000VDC
Rated Capacitance (μF) : 0.047μF ~ 3.3μF

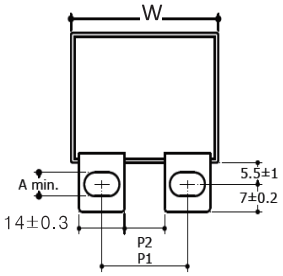


Fig1)Terminal F

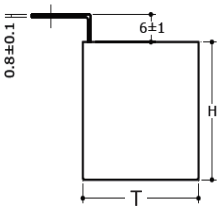
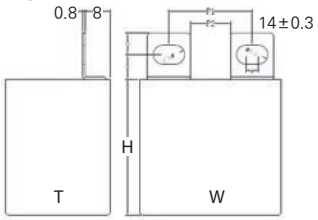


Fig3)Terminal B



A:Hole10ØX6

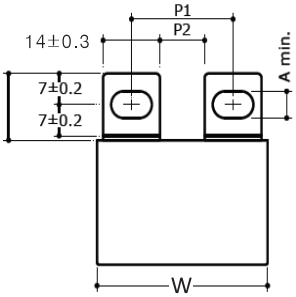
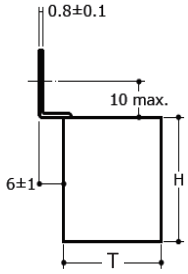


Fig2)Terminal G



* Option : Case, terminal spacing, change adjustable.

Type	Case Dimension(mm)				
	W	T	H	P1	P2
F1	38	16	25	-	-
F2	45	20	32	25.0	11
F3	46	24	34	27.0	13
F4	46	33	44	27.0	13
F5	54	40	50	28.0	14
F6	58	35	50	28.0	14

* Type : Terminal(F,G,H,I,J,K----), ex)F3:Terminal F or G,B, Case 3

Snubber Capacitors

DMF-SC Series

Polypropylene Film Capacitor

■ Dimension Table : Nominal values

Working Voltage 1000 VDC (480 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
0.100	38	16	25	-	-	1200	120	5.6	11.20	F,G,CP
0.150	38	16	25	-	-	1200	180	5.7	10.80	F,G,CP
0.220	38	16	25	-	-	1200	264	6.8	10.40	F,G,CP
0.220	45	20	32	25	11	1200	264	18.2	4.20	F,G,B
0.270	45	20	32	25	11	1000	270	18.7	4.00	F,G,B
0.330	45	20	32	25	11	1000	330	19.7	3.70	F,G,B
0.390	45	20	32	25	11	1000	390	20.6	3.70	F,G,B
0.470	45	20	32	25	11	1000	470	21.1	3.50	F,G,B
0.560	45	20	32	25	11	900	504	21.3	3.50	F,G,B
0.680	45	20	32	25	11	900	612	21.3	3.50	F,G,B
0.750	46	24	34	27	13	900	675	25.6	3.20	F,G,B
0.820	46	24	34	27	13	900	738	26.0	3.00	F,G,B
1.000	46	24	34	27	13	900	900	26.0	3.00	F,G,B
1.200	46	33	44	27	13	900	1080	26.0	2.50	F,G,B
1.500	46	33	44	27	13	900	1350	26.0	2.50	F,G,B
1.750	46	33	44	27	13	800	1400	28.0	2.50	F,G,B
2.000	46	33	44	27	13	800	1600	28.2	2.50	F,G,B
2.200	46	33	44	27	13	700	1540	28.5	2.40	F,G,B
2.500	54	40	50	28	14	600	1500	29.0	2.20	F,G,B
3.000	54	40	50	28	14	600	1800	30.0	2.00	F,G,B
3.300	54	40	50	28	14	600	1980	30.0	2.00	F,G,B

Working Voltage 1250 VDC (550 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
0.100	38	16	25	-	-	1400	140	5.6	11.20	F,G,B
0.150	38	16	25	-	-	1400	210	5.7	10.80	F,G,B
0.220	38	16	25	-	-	1400	308	6.8	10.40	F,G,B
0.220	45	20	32	25	11	1400	308	18.2	4.20	F,G,B
0.270	45	20	32	25	11	1200	324	18.7	4.00	F,G,B
0.330	45	20	32	25	11	1200	396	19.7	3.70	F,G,B
0.390	45	20	32	25	11	1200	468	20.6	3.70	F,G,B
0.470	45	20	32	25	11	1200	564	21.1	3.50	F,G,B
0.560	46	24	34	27	13	1100	616	21.3	3.50	F,G,B
0.680	46	24	34	27	13	1100	748	21.3	3.50	F,G,B
0.750	46	24	34	27	13	1100	825	25.6	3.20	F,G,B
0.820	46	33	44	27	13	1100	902	26.0	3.00	F,G,B
1.000	46	33	44	27	13	1100	1100	26.0	3.00	F,G,B
1.200	46	33	44	27	13	800	960	26.0	2.50	F,G,B
1.500	46	33	44	27	13	800	1200	26.0	2.50	F,G,B
1.750	54	40	50	28	14	800	1400	28.0	2.50	F,G,B

DAEDONG CAPACITOR CO., LTD.

Snubber Capacitors

DMF-SC Series

Polypropylene Film Capacitor

Working Voltage 1250 VDC (550 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
1.800	46	33	44	27	13	800	1440	26.0	2.50	F,G,B
2.000	46	33	44	27	13	800	1600	28.2	2.50	F,G.B
2.000	54	40	50	28	14	800	1600	28.2	2.50	F,G,B
2.200	54	40	50	28	14	800	1760	28.5	2.40	F,G,B
2.500	54	40	50	28	14	800	2000	29.0	2.20	F,G,B

Working Voltage 1500 VDC (630 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
0.100	38	16	25	-	-	1600	160	5.6	11.20	F,G,B
0.150	38	16	25	-	-	1600	240	5.7	10.80	F,G,B
0.220	45	20	32	25	11	1600	352	18.2	4.20	F,G,B
0.270	45	20	32	25	11	1400	378	18.7	4.00	F,G,B
0.330	46	24	34	27	13	1400	462	19.7	3.70	F,G,B
0.390	46	24	34	27	13	1400	546	20.6	3.70	F,G,B
0.470	46	24	34	27	13	1400	658	21.1	3.50	F,G,B
0.560	46	33	44	27	13	1300	728	21.3	3.50	F,G,B
0.680	46	33	44	27	13	1300	884	21.3	3.50	F,G,B
0.750	46	33	44	27	13	1300	975	25.6	3.20	F,G,B
0.820	46	33	44	27	13	1300	1066	26.0	3.00	F,G,B
1.000	46	33	44	27	13	1300	1300	26.0	3.00	F,G,B
1.200	46	33	44	27	13	1300	1560	26.0	2.50	F,G,B
1.500	54	40	50	28	14	1300	1950	26.0	2.50	F,G,B
1.750	54	40	50	28	14	1000	1750	28.0	2.50	F,G,B
2.000	54	40	50	28	14	1000	2000	28.2	2.50	F,G,B

Working Voltage 2000 VDC (700 VAC)

Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
0.100	45	20	35	25	11	1900	190	13.2	16.50	F,G,B
0.150	45	20	32	25	11	1900	285	15.11	10.20	F,G,B
0.220	46	24	34	27	13	1900	418	19.8	7.30	F,G,B
0.270	46	24	34	27	13	1900	513	21.7	4.30	F,G,B
0.330	46	33	44	27	13	1700	561	22.2	4.30	F,G,B
0.390	46	33	44	27	13	1700	663	22.5	4.00	F,G,B
0.470	46	33	44	27	13	1700	799	22.5	4.00	F,G,B
0.500	46	33	44	27	13	1700	850	22.6	3.90	F,G,B
0.560	46	33	44	27	13	1600	896	22.7	3.80	F,G,B
0.680	54	40	50	28	14	1600	1088	22.8	3.70	F,G,B
0.750	54	40	50	28	14	1500	1125	23.2	3.40	F,G,B
0.820	54	40	50	28	14	1500	1230	23.2	3.30	F,G,B
1.000	54	40	50	28	14	1500	1500	23.3	3.20	F,G,B

DAEDONG CAPACITOR CO., LTD.

Snubber Capacitors

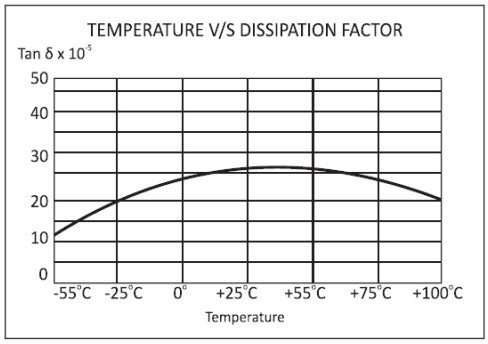
DMF-SC Series

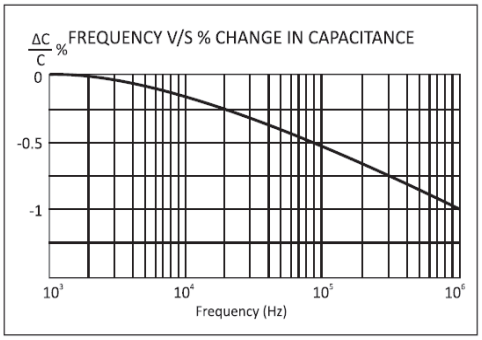
Polypropylene Film Capacitor

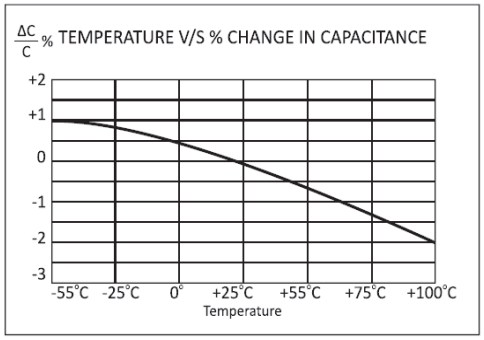
Working Voltage 3000 VDC (750 VAC)

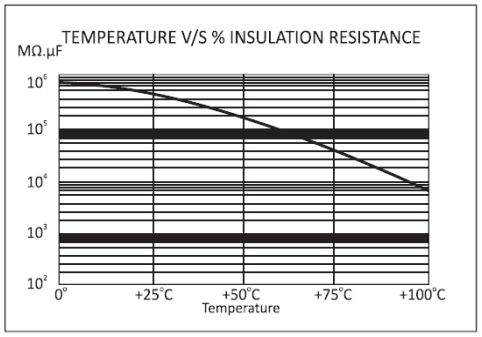
Rated Capacitance μF	Dimension(mm)					dV/dt V/μs	I peak Amps	Irms Max at 100KHz & 55℃ Amps	ESR Max at 100KHz mΩ	Terminal Style
	W	T	H	P1	P2					
0.047	46	24	34	27	13	2500	118	8.0	16.50	F,G,B
0.068	46	24	34	27	13	2500	170	9.0	11.50	F,G,B
0.100	46	24	34	27	13	2050	205	11	15.50	F,G,B
0.150	46	24	34	27	13	2050	308	14	10.20	F,G,B
0.220	46	24	34	27	13	2050	451	18	7.30	F,G,B
0.220	46	33	44	27	13	2050	451	18	7.30	F,G,B
0.330	46	33	44	27	13	1400	462	21.5	4.30	F,G,B
0.470	46	33	44	27	13	1400	658	22	3.80	F,G,B
0.560	54	40	50	28	14	1400	784	24	3.50	F,G,B
0.680	54	40	50	28	14	1150	782	25	5.10	F,G,B
0.820	54	40	50	28	14	1150	943	26	4.50	F,G,B
1.000	54	40	50	28	14	1150	1150	28	3.90	F,G,B

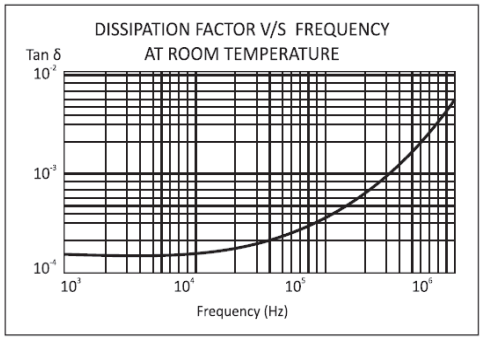
■ Typical Performance Curves









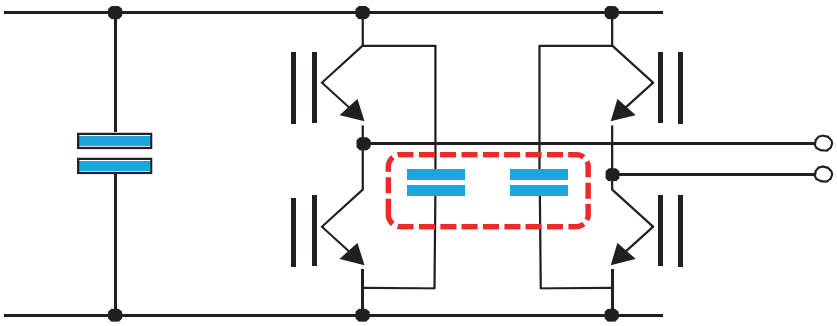


Snubber Capacitors

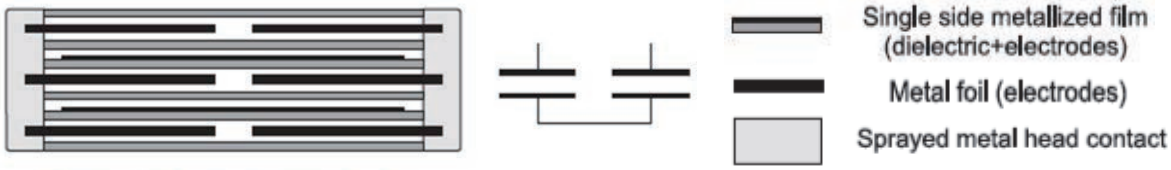
DMF-SC Series

Polypropylene Film Capacitor

■ IGBT Snubber Capacitor



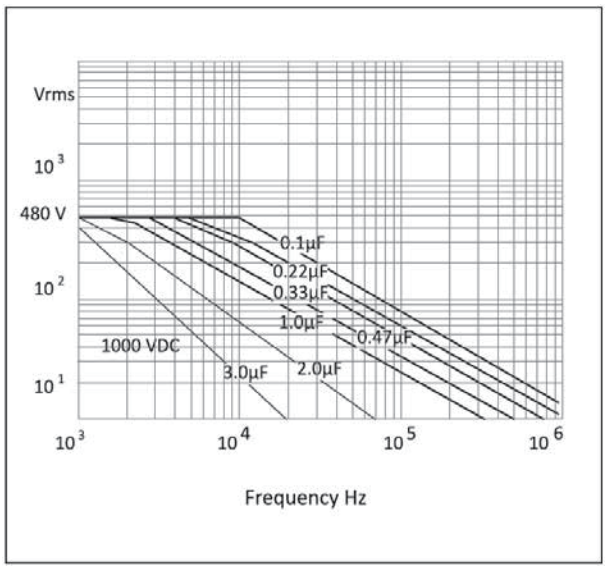
■ Element Costruction

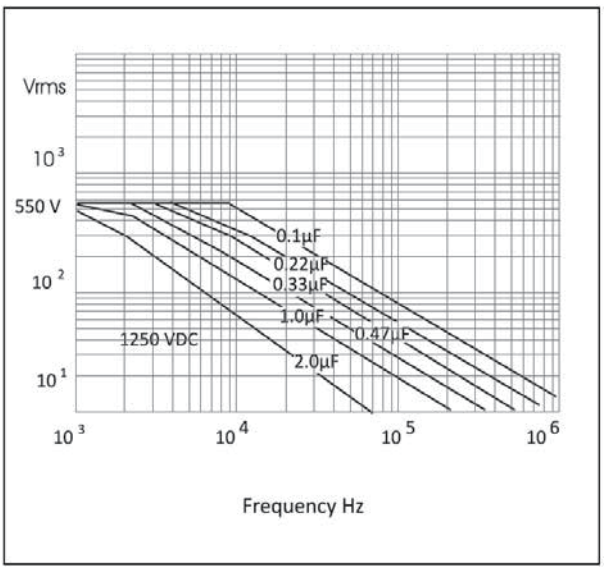


Extended foil design with internal series connection and metallized film (series connection of 2 elements)

■ Frequency Derating

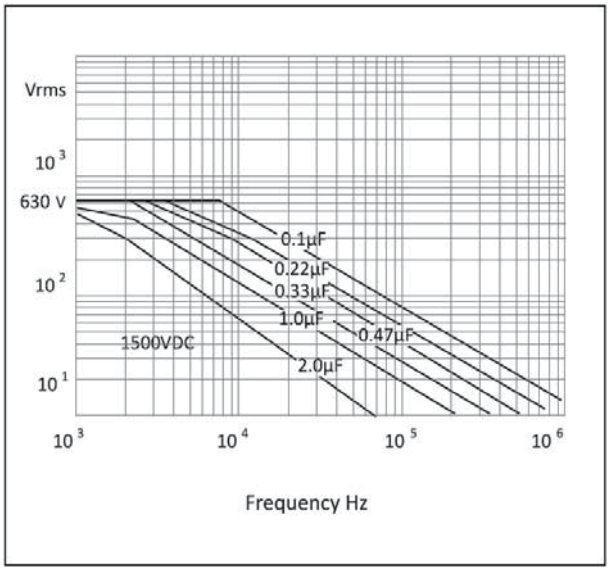
AC Voltage Derating v/s Frequency at 10℃ internal temperature Rise (general reference).

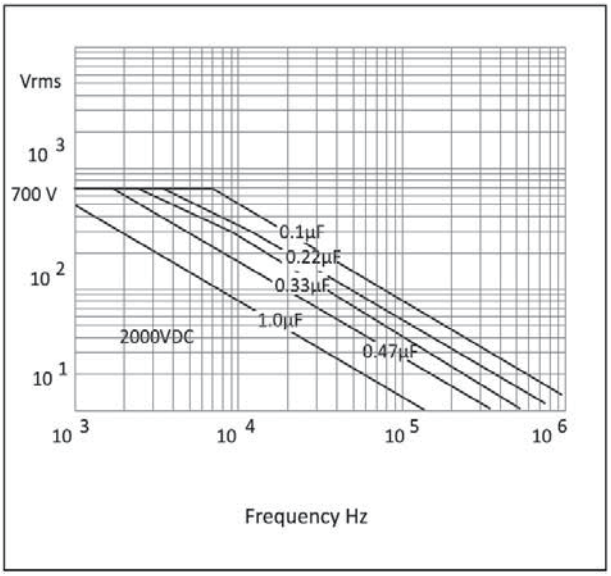




■ Frequency Derating

AC Voltage Derating v/s Frequency at 10℃ internal temperature Rise (general reference).





DC-Link Capacitors

DAEDONG CAPACITOR CO., LTD.

DAL-D Series

Metallized Polypropylene Film Capacitor

■ Applications

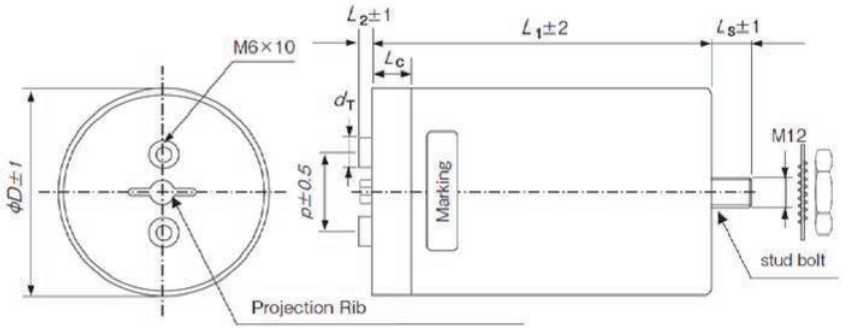
DAL- D series are made with cylindrically-shaped aluminium case or rectangular aluminium case and big capacitance. As well as using designed specially metallized polypropylene film for the high- surge voltage(Us) , high- ripple current (I max),and maximium peak current(Î). Thay are apply to DC-Link and wind & solar power inverters ,charge & discharge , general DC power circuit, UPS etc.

■ Characteristics

Items	Characteristics
Temperature Range	-40°C ~ +85°C
Rated Voltage U_R	900 V DC ~ 1500 V DC
Surge Voltage U_S	1350 V ~ 2250 V
Ripple Voltage U_r	200 Vpk-pk ~ 350 Vpk-pk
Voltage Test U_{BB}	U_R × 1.5 V DC / 10 sec
Voltage Test U_{BG}	3200V AC / 1min
Terminals (permitted Torque)	M6 x 10 (4 Nm)
Stud Bolt (permitted Torque)	M12 x 16/18 (7 Nm)
Life Time Test / Standard	IEC 61071
Dielectric	Specially designed Metallized Polypropylene Film
Electrode	Option:Segmented Metalization with Fuse Function
Cap	PBT UL 94-V0 listed
Impregnants	Epoxy Resin UL 94-V0 listed
Case Material	Cylindrically -Shaped Aluminium Impact Case or Rectangular-Shaped Aluminium Case
Vibration	IEC 68-2-6, 30 cycles 10-500Hz 10g
Humidity	Class F: 75% annual average, 95% 30 days/year

■ Outline Drawings

Standard nominal cylindrically-shaped aluminium case



DC-Link Capacitors

DAL-D Series

Metallized Polypropylene Film Capacitor

Rated Voltage U_R Surge Voltage Us Ripple Voltage U_r (V_{DC} / V)	Capa-citance C_N (μF)	Maximum Ripple Current (rms) I max (A)	Maximum Peak Current Î Î [kA]	Maximum Surge Current I_S (kA)	Charge Energy W W (J)	Equivalent Series Resistance ESR (mΩ)	Equivalent Series Inductance ESL (nH)	Thermal Resistance R_{th} (K/W)	Size DØ x L1 (mm)	Remark
	180	**28**	**4**	**12**	**73**	**2.9**	**60**	**8.4**	**86x70**	
	200	28	4	12	81	3.4	65	7.9	86x75	
	210	**26**	**5**	**15**	**85**	**2.6**	**60**	**11**	**88.5x70**	
		26	5	15	93	2.8	65	10.2	88.5x75	
	230	28	4	12	93	3.3	65	7.4	86x80	
	250	26	4	12	101	3.1	65	9.2	88.5x80	
	260	28	4	12	105	3.7	75	6.8	86x87	
	270	**37**	**6**	**18**	**109**	**2.2**	**60**	**6.5**	**100x70**	
	280	26	4	12	113	3.4	75	8.3	88.5x87	
	290	27	4	12	117	4.1	80	6.4	86x95	
	300	37	6	18	122	2.3	65	6.1	100x75	
	320	**26**	**4**	**12**	**130**	**3.8**	**80**	**7.5**	**88.5x95**	
		36	6	18	134	2.5	65	5.9	100x80	
	330	27	4	12	134	4.8	90	5.6	86x106	
	360	26	4	12	146	4.4	90	6.5	88.5x106	
		36	6	18	150	2.8	75	5.4	100x87	
	370	**52**	**8**	**24**	**150**	**1.5**	**40**	**4.8**	**86x125**	
	380	**44**	**8**	**24**	**154**	**1.7**	**60**	**6**	**116x70**	
	390	26	4	12	158	5.5	100	5.2	86x120	
		43	8	24	166	1.9	65	5.6	116x75	
	410	52	8	24	166	1.6	40	4.5	86x135	
		52	**9**	**27**	**170**	**1.4**	**40**	**5.3**	**88.5x125**	
	420	**35**	**6**	**18**	**170**	**3.1**	**80**	**5.4**	**100x95**	
	430	26	5	15	174	5.1	100	5.6	88.5x120	
		52	9	27	186	1.5	40	4.9	88.5x135	
		43	8	24	186	2	65	5.2	116x80	
	460	53	8	24	186	1.7	45	4.1	86x145	
	480	34	6	18	194	3.5	90	4.7	100x106	
UR:900 V DC	510	52	9	27	207	1.6	45	4.5	88.5x145	
Us :1350 V		43	8	24	211	2.2	75	5	116x87	
Ur: 200 V	520	52	8	24	211	1.9	50	3.8	86x159	
	540	**67**	**12**	**36**	**219**	**1.1**	**40**	**3.9**	**100x125**	
	560	33	6	18	227	4.1	100	4.3	100x120	
		53	9	27	231	1.8	50	4	88.5x159	
	570	**54**	**12**	**36**	**231**	**1.4**	**60**	**4.9**	**140x70**	136 x 75
		43	**8**	**24**	**239**	**2.4**	**80**	**4.5**	**116x175**	
	590	**52**	**8**	**24**	**239**	**2.1**	**55**	**3.4**	**86x175**	
	600	67	12	36	243	1.2	40	3.6	100x135	
	630	54	12	36	255	1.5	65	4.6	140x75	136 x 75
	650	**53**	**9**	**27**	**263**	**2**	**55**	**3.6**	**88.5x175**	
		41	8	24	267	2.8	90	4.2	116x106	
	660	52	8	24	267	2.5	60	3	86x197	
	670	66	12	36	271	1.3	45	3.5	100x145	
	700	54	12	36	284	1.6	65	4.3	140x80	
	730	51	9	27	296	2.3	60	3.3	88.5x197	
	750	65	12	36	304	1.5	50	3.2	100x159	

※ Possible case diameter(mm) : 63Ø, 76Ø, 86Ø, 96Ø, 116Ø, 136Ø

Rated Voltage U_R Surge Voltage Us Ripple Voltage U_r (V_{DC} / V)	Capa-citance C_N (µF)	Maximum Ripple Current (rms) I max (A)	Maximum Peak Current $\hat{I}$ $\hat{I}$ [kA]	Maximum Surge Current I_S (kA)	Charge Energy W W (J)	Equivalent Series Resistance ESR (mΩ)	Equivalent Series Inductance ESL (nH)	Thermal Resistance R_{th} (K/W)	Size DØ x L1 (mm)	Remark
	760	**79**	**16**	**48**	**308**	**0.9**	**40**	**3.5**	**116x125**	
		41	8	24	316	3.2	100	3.6	116x120	
		53	12	36	316	1.7	75	4.1	140x87	136 x 87
	780	51	8	24	316	2	70	2.7	86x225	
	830	78	16	48	336	1	40	3.3	116x135	
	850	**66**	**12**	**36**	**344**	**1.6**	**55**	**2.8**	**100x175**	
	870	**52**	**9**	**27**	**352**	**2.6**	**70**	**2.8**	**88.5x225**	
	890	**54**	**12**	**36**	**360**	**1.9**	**80**	**3.7**	**140x95**	136 x 95
	930	77	16	48	377	1.1	45	3.1	116x145	
	960	66	12	36	389	1.9	60	2.5	100x197	
		77	16	48	405	1.2	50	2.8	116x159	
	1000	52	12	36	405	2.1	90	3.4	140x106	136 x 106
		64	**11**	**33**	**446**	**2.2**	**70**	**2.2**	**100x225**	
U_R:900 VDC		**77**	**15**	**45**	**446**	**1.4**	**55**	**2.5**	**116x175**	
Us:1350 V	**1100**	51	11	33	446	2.6	100	3	140x120	136 x 120
Ur: 200 V		**95**	**24**	**72**	**446**	**0.8**	**40**	**2.9**	**140x125**	136 x 125
	1200	97	23	69	486	0.8	40	2.6	140x135	136 x 135
	1300	75	16	48	527	1.5	60	2.3	116x197	
	1400	97	24	72	567	0.9	45	2.5	140x145	136 x 145
		76	16	48	608	1.8	70	2	116x225	
	1500	96	23	69	608	0.9	50	2.3	140x159	136 x 159
	1700	**96**	**23**	**69**	**689**	**1**	**55**	**2.1**	**140x175**	136 x 175
	2000	95	24	72	810	1.2	60	1.9	140x197	136 x 197
	2300	**93**	**24**	**72**	**932**	**1.3**	**70**	**1.7**	**140x225**	136 x 225
	140	**26**	**3**	**9**	**85**	**3.3**	**60**	**8.6**	**86x70**	
	160	27	4	12	97	3.5	65	7.6	86x75	
	170	**25**	**4**	**12**	**103**	**2.8**	**60**	**10.9**	**88.5x70**	
		27	4	12	109	3.7	65	7.1	86x80	
	180	25	4	12	109	3.2	65	9.8	88.5x75	
		26	4	12	121	4.2	75	6.9	86x87	
	200	25	4	12	121	3.4	65	9	88.5x80	
	210	**34**	**5**	**15**	**127**	**2.4**	**60**	**6.9**	**100x70**	
U_R:1100 VDC		**26**	**4**	**12**	**139**	**4.6**	**80**	**6.2**	**86x95**	
Us:1650 V		25	4	12	139	3.7	75	8.3	88.5x87	
Ur: 250 V	**230**	34	5	15	139	2.6	65	6.4	100x75	
		25	4	12	157	5.3	90	5.8	86x106	
		25	**4**	**12**	**157**	**4.2**	**80**	**7.5**	**88.5x95**	
	260	33	5	15	157	2.8	65	6.3	100x80	
		50	**7**	**21**	**175**	**1.7**	**40**	**4.7**	**86x125**	
		25	4	12	175	4.9	90	6.4	88.5x106	
	290	33	5	15	175	3.1	75	5.8	100x87	
		41	**7**	**21**	**175**	**1.9**	**60**	**6**	**116x70**	
	310	25	4	12	188	6.1	100	5.1	86x120	
		51	7	21	194	1.8	40	4.3	86x135	
	320	41	7	21	194	2.1	65	5.6	116x75	
		50	**8**	**24**	**200**	**1.5**	**40**	**5.3**	**88.5 x 125**	
	330	**33**	**5**	**15**	**200**	**3.4**	**80**	**5.2**	**100 x 95**	
	350	25	4	12	212	5.5	100	5.6	88.5x120	
		49	7	21	218	1.9	45	4.2	86x145	
	360	41	7	21	218	2.2	65	5.2	116x80	
	370	50	8	24	224	1.6	40	4.8	88.5x135	
	380	32	5	15	230	3.9	90	4.8	100x106	
	390	**52**	**8**	**24**	**236**	**1.7**	**48**	**3.1**	**86 x 137**	
		50	7	21	242	2.2	50	3.7	86x159	
	400	40	7	21	242	2.5	75	5	116x87	
	410	50	8	24	248	1.8	45	4.6	88.5x145	
	420	37	8	24	254	1.7	47	4.3	88.5x137	
	440	**65**	**10**	**30**	**266**	**1.2**	**40**	**3.9**	**100 x 125**	

Rated Voltage U_R Surge Voltage Us Ripple Voltage U_r (V_{DC} / V)	Capa-citance C_N (µF)	Maximum Ripple Current (rms) I max (A)	Maximum Peak Current Î Î [kA]	Maximum Surge Current I_S (kA)	Charge Energy W W (J)	Equivalent Series Resistance ESR (mΩ)	Equivalent Series Inductance ESL (nH)	Thermal Resistance R_{th} (K/W)	Size DØ x L1 (mm)	Remark
		52	**10**	**30**	**272**	**1.5**	**60**	**4.8**	**140 x 70**	136 x 70
		40	7	21	272	2.7	80	4.4	116x95	
	450	52	8	24	272	1.9	50	3.9	88.5x150	
		32	5	15	272	4.5	100	4.2	100x120	
		49	**7**	**21**	**278**	**2.4**	**55**	**3.4**	**85 x 175**	
		49	8	24	278	1.9	50	4.2	88.5x159	
	460	**40**	**7**	**21**	**278**	**2.7**	**80**	**4.5**	**116 x 95**	
		53	**11**	**33**	**278**	**1.5**	**60**	**4.8**	**140 x 70**	136 x 70
	470	64	10	30	284	1.4	40	3.6	100x135	
	480	49	7	21	290	2.4	55	3.4	86x175	
UR:1100 VDC	500	53	11	33	303	1.6	65	4.6	140x75	136 x 75
Us:1650 V	520	63	10	30	315	1.5	45	3.4	100x145	
Ur: 250 V		49	7	21	321	2.7	60	3.1	86x197	
		51	**8**	**24**	**321**	**2.1**	**55**	**3.6**	**88.5 x 175**	
	530	41	7	21	321	3	90	4	116x106	
	560	52	11	33	339	1.7	65	4.3	140x80	136 x 80
		63	10	30	351	1.6	50	3.1	100x159	
	580	**73**	**14**	**42**	**351**	**1**	**40**	**3.6**	**116 x 125**	
	590	50	8	24	357	2.5	60	3.2	88.5x197	
		48	7	21	375	3.2	70	2.7	86x225	
	620	40	7	21	375	3.5	100	3.6	116x120	
	630	53	11	33	381	1.8	75	3.9	140x87	136 x 87
	650	75	14	42	393	1.1	40	3.3	116x135	
	690	**63**	**10**	**30**	**417**	**1.7**	**55**	**2.9**	**100 x 175**	
	700	**50**	**8**	**24**	**424**	**2.9**	**70**	**2.8**	**88.5 x 225**	
		75	14	42	436	1.2	45	3	116x145	
	720	**52**	**11**	**33**	**436**	**2**	**80**	**3.7**	**140 x 95**	136 x 95
	750	73	14	42	454	1.7	48	3.1	116x145	
	760	63	10	30	460	2	60	2.5	100x197	
		74	14	42	490	1.3	50	2.8	116x159	
	810	50	11	33	490	2.3	90	3.4	140x106	136 x 106
	900	**62**	**10**	**30**	**545**	**2.4**	**70**	**2.2**	**100 x 225**	
		73	**14**	**42**	**557**	**1.4**	**55**	**2.6**	**116 x 175**	
	920	**93**	**22**	**66**	**557**	**0.8**	**40**	**2.9**	**140 x 125**	136 x 125
	950	50	11	33	575	2.6	100	3	140x120	136 x 120
		94	22	66	605	0.8	40	2.7	140x135	136 x 135
	1000	71	14	42	641	1.7	60	2.3	116x197	
UR:1100 VDC	1060	73	14	42	641	1.6	45	3	116x197	
Us:1650 V	1100	94	21	63	666	0.9	45	2.5	140x145	136 x 145
Ur: 250 V		92	21	63	726	1	50	2.3	140x159	136 x 159
	1200	**73**	**14**	**42**	**756**	**1.9**	**70**	**2**	**116 x 225**	
	1250	74	14	42	756	1.9	70	2	116x225	
	1400	**93**	**21**	**63**	**847**	**1.1**	**55**	**2.1**	**140 x 175**	136 x 175
	1600	92	22	66	968	1.2	60	1.9	140x197	
	1900	**91**	**22**	**66**	**1150**	**1.4**	**70**	**1.7**	**140 x 225**	136 x 225
	100	**25**	**3**	**9**	**85**	**3.8**	**60**	**8.1**	**86 x 70**	
		25	3	9	93	4.1	65	7.6	86 x 75	
	110	**23**	**3**	**9**	**93**	**3.5**	**60**	**10.4**	**88.5 x 70**	
	120	23	3	9	101	3.8	65	9.6	88.5 x 75	
	130	25	3	9	110	4.2	65	7.3	86 x 80	
		24	3	9	118	4.8	75	7	86 x 87	
	140	23	3	9	118	4	65	9.2	88.5 x 80	
UR:1300 VDC	**150**	**32**	**4**	**12**	**127**	**2.7**	**60**	**6.9**	**100 x 70**	
Us:1950 V		**24**	**3**	**9**	**135**	**5.4**	**80**	**6.3**	**86 x 95**	
Ur: 300 V	**160**	23	3	9	135	4.3	75	8.5	88.5 x 87	
	170	32	4	12	144	2.9	65	6.5	100 x 75	
		23	**3**	**9**	**152**	**4.9**	**80**	**7.5**	**88.5 x 95**	
	180	31	4	12	152	3.3	65	6.2	100 x 80	
	190	24	3	9	161	6	90	5.6	86 x 106	
	200	23	3	9	169	5.7	90	6.4	88.5 x 106	

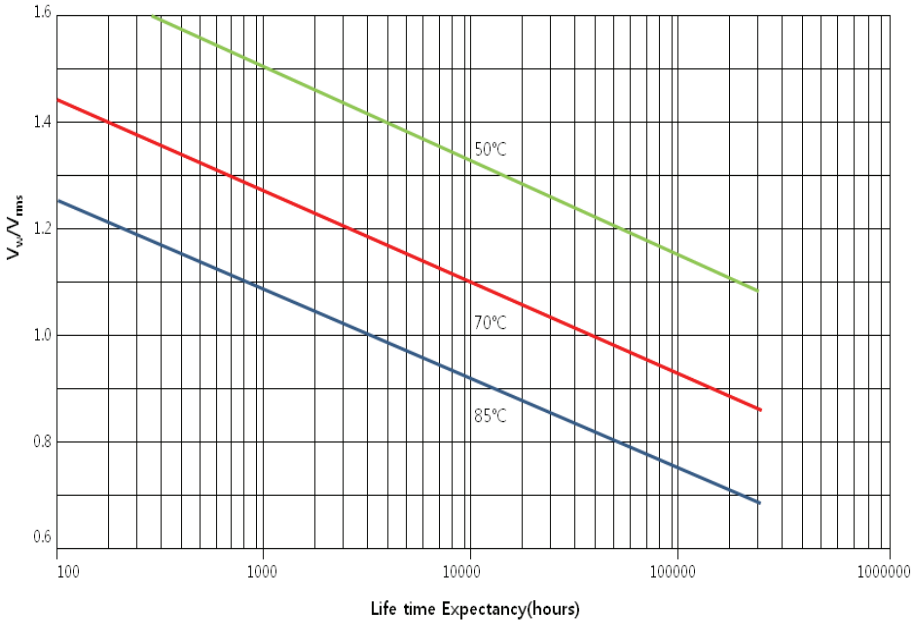
Rated Voltage U_R Surge Voltage Us Ripple Voltage U_r (V_{DC} / V)	Capa-citance C_N (µF)	Maximum Ripple Current (rms) I max (A)	Maximum Peak Current $\hat{I}$ $\hat{I}$ [kA]	Maximum Surge Current I_S (kA)	Charge Energy W W (J)	Equivalent Series Resistance ESR (mΩ)	Equivalent Series Inductance ESL (nH)	Thermal Resistance R_{th} (K/W)	Size DØ x L1 (mm)	Remark
		47	**6**	**18**	**177**	**1.9**	**40**	**4.7**	**85 x 125**	
		31	4	12	177	3.5	75	5.8	100 x 87	
UR:1300 VDC	**210**	**39**	**6**	**18**	**177**	**2.1**	**60**	**5.9**	**116 x 70**	
Us:1950 V	220	23	3	9	186	7	100	5.2	86 x 120	
Ur: 300 V		47	6	18	194	2	40	4.3	86 x 135	
		47	**7**	**21**	**194**	**1.8**	**40**	**5.2**	**88.5 x 125**	
	230	39	6	18	194	2.3	65	5.5	116 x 75	
		23	3	9	203	6.5	100	5.6	88.5 x 120	
	240	**31**	**4**	**12**	**203**	**3.8**	**80**	**5.2**	**100 x 95**	
	250	46	7	21	211	1.9	40	4.8	88.5 x 135	
		48	6	18	220	2.2	45	4	86 x 145	
	260	39	6	18	220	2.5	65	5.2	116 x 80	
	270	30	4	12	228	4.4	90	4.8	100 x 106	
	280	47	7	21	237	2.1	45	4.4	88.5 x 145	
		46	6	18	245	2.4	50	3.8	86 x 159	
	290	38	6	18	245	2.7	75	4.9	116 x 87	
	300	**60**	**9**	**27**	**254**	**1.4**	**40**	**3.9**	**100 x 125**	
	310	**49**	**9**	**27**	**262**	**1.7**	**60**	**4.9**	**140 x 70**	136 x 70
		46	7	21	270	2.2	50	4.1	88.5 x 159	
	320	30	4	12	270	5.1	100	4.2	100 x 120	
		46	**6**	**18**	**279**	**2.7**	**55**	**3.4**	**86 x 175**	
		60	9	27	279	1.5	40	3.6	100 x 135	
	330	**38**	**6**	**18**	**279**	**3**	**80**	**4.5**	**116 x 95**	
	350	51	9	27	296	1.7	65	4.4	140 x 75	136 x 75
	360	**47**	**7**	**21**	**304**	**2.5**	**55**	**3.6**	**88.5 x 175**	
	370	60	9	27	313	1.7	45	3.3	100 x 145	
		46	6	18	321	3.1	60	3	86 x 197	
		39	6	18	321	3.4	90	3.9	116 x 106	
	380	50	9	27	321	1.9	65	4.2	140 x 80	136 x 80
	410	46	7	21	346	2.9	60	3.2	88.5 x 197	
		60	9	27	355	1.8	50	3.1	100 x 159	
	420	**71**	**12**	**36**	**355**	**1.1**	**40**	**3.5**	**116 x 125**	
	430	48	9	27	363	2.1	75	4.1	140 x 87	136 x 87
		46	**6**	**18**	**380**	**3.5**	**70**	**2.7**	**85 x 225**	
	450	38	6	18	380	3.9	100	3.6	116 x 120	
	460	70	12	36	389	1.2	40	3.3	116 x 135	
	470	**58**	**9**	**27**	**397**	**2**	**55**	**2.9**	**100 x 175**	
	480	**45**	**7**	**21**	**406**	**3.3**	**70**	**2.9**	**88.5 x 225**	
	490	**49**	**9**	**27**	**414**	**2.3**	**80**	**3.7**	**140 x 95**	136 x 95
	520	71	12	36	439	1.3	45	3	116 x 145	
UR:1300 VDC		58	9	27	465	2.3	60	2.6	100 x 197	
Us:1950 V	550	47	9	27	465	2.6	90	3.4	140 x 106	136 x 106
Ur: 300 V	580	70	12	36	490	1.4	50	2.8	116 x 159	
	630	**90**	**18**	**54**	**532**	**0.9**	**40**	**2.8**	**140 x 125**	136 x 125
		57	**9**	**27**	**549**	**2.6**	**70**	**2.3**	**100 x 225**	
	650	48	9	27	549	3	100	2.9	140 x 120	136 x 120
	660	**69**	**12**	**36**	**558**	**1.6**	**55**	**2.6**	**116 x 175**	
	700	90	18	54	592	0.9	40	2.6	140 x 135	136 x 135
	760	69	12	36	642	1.8	60	2.3	116 x 197	
	770	89	18	54	651	1	45	2.5	140 x 145	136 x 145
	870	88	18	54	735	1.1	50	2.3	140 x 159	136 x 159
	900	**70**	**13**	**39**	**761**	**2.1**	**70**	**2**	**116 x 225**	
	990	**89**	**18**	**54**	**837**	**1.2**	**55**	**2.1**	**140 x 175**	136 x 175
	1000	70	11	33	845	2.7	87	1.5	116 x 265	
	1100	87	18	54	930	1.4	60	1.9	140 x 197	
	1300	**89**	**18**	**54**	**1099**	**1.6**	**70**	**1.6**	**140 x 225**	136 x 225
UR:1500 VDC	**70**	**23**	**2**	**6**	**79**	**4.6**	**60**	**8**	**86 x 70**	
Us:2250 V		23	2	6	90	4.8	65	7.7	86 x 75	
Ur:350 V	**80**	**21**	**3**	**9**	**90**	**4.1**	**60**	**10.8**	**88.5 x 70**	

Rated Voltage U_R Surge Voltage Us Ripple Voltage U_r (V_{DC} / V)	Capa-citance C_N (µF)	Maximum Ripple Current (rms) I max (A)	Maximum Peak Current $\hat{I}$ $\hat{I}$ [kA]	Maximum Surge Current I_S (kA)	Charge Energy W W (J)	Equivalent Series Resistance ESR (mΩ)	Equivalent Series Inductance ESL (nH)	Thermal Resistance R_{th} (K/W)	Size DØ x L1 (mm)	Remark
		23	3	9	101	5.1	65	7.1	86 x 80	
	90	21	3	9	101	4.3	65	10.2	88.5 x 75	
UR:1500 VDC		22	2	6	113	5.7	75	7	86 x 87	
Us:2250 V	100	21	3	9	113	4.7	65	9.4	88.5 x 80	
Ur:350 V		**22**	**2**	**6**	**124**	**6.5**	**80**	**6.1**	**86 x 95**	
		21	3	9	124	5.2	75	8.4	88.5 x 87	
	110	**30**	**4**	**12**	**124**	**3.1**	**60**	**6.9**	**100 x 70**	
	120	30	4	12	135	3.4	65	6.3	100 x 75	
		22	3	9	146	7.3	90	5.5	86 x 106	
		22	**3**	**9**	**146**	**5.6**	**80**	**7.1**	**88.5 x 106**	
	130	29	4	12	146	3.8	65	6.1	100 x 80	
		44	**5**	**15**	**169**	**2.2**	**40**	**4.7**	**86 x 125**	
		22	3	9	169	6.4	90	6.2	88.5 x 106	
	150	29	4	12	169	4	75	5.7	100 x 87	
		38	**5**	**15**	**169**	**2.5**	**60**	**5.7**	**116 x 70**	
		22	3	9	180	8.1	100	4.9	86 x 120	
		43	5	15	180	2.4	40	4.3	86 x 135	
	160	36	5	15	180	2.7	65	5.5	116 x 75	
		21	3	9	191	7.7	100	5.7	88.5 x 120	
		43	**6**	**18**	**191**	**2**	**40**	**5.3**	**88.5 x 125**	
	170	**29**	**4**	**12**	**191**	**4.5**	**80**	**5.1**	**100 x 95**	
		44	5	15	203	2.6	45	4	86 x 145	
		43	6	18	203	2.2	40	5	88.5 x 135	
	180	37	5	15	203	2.9	65	5.1	116 x 80	
	190	28	4	12	214	5.2	90	4.7	100 x 106	
		42	5	15	225	2.9	50	3.8	86 x 159	
		42	6	18	225	2.4	45	4.6	88.5 x 145	
	200	34	5	15	225	3.2	75	5.2	116 x 87	
	210	**55**	**7**	**21**	**236**	**1.7**	**40**	**3.9**	**100 x 125**	
		42	**5**	**15**	**259**	**3.2**	**55**	**3.4**	**86 x 175**	
		44	6	18	259	2.6	50	4	88.5 x 159	
		28	4	12	259	5.9	100	4.2	100 x 120	
	230	**34**	**5**	**15**	**259**	**3.5**	**80**	**4.7**	**116 x 95**	
		47	**8**	**24**	**259**	**1.8**	**60**	**4.8**	**140 x 70**	136 x 70
	240	54	7	21	270	1.8	40	3.8	100 x 135	
	250	48	8	24	281	2	65	4.4	140 x 75	136 x 75
UR:1500 VDC		**44**	**6**	**18**	**293**	**2.9**	**55**	**3.6**	**88.5 x 175**	
Us:2250 V	**260**	54	7	21	293	2	45	3.5	100 x 145	
Ur:350 V		43	5	15	304	3.6	60	3	86 x 197	
	270	34	5	15	304	3.9	90	4.3	116 x 106	
	280	47	8	24	315	2.1	65	4.3	140 x 80	
		43	6	18	338	3.3	60	3.2	88.5 x 197	
		54	7	21	338	2.1	50	3.2	100 x 159	
	300	**67**	**10**	**30**	**338**	**1.3**	**40**	**3.4**	**116 x 125**	
		43	**5**	**15**	**360**	**4.2**	**70**	**2.6**	**86 x 225**	
		35	5	15	360	4.5	100	3.7	116 x 120	
	320	47	8	24	360	2.3	75	4	140 x 87	136 x 87
	330	67	10	30	371	1.4	40	3.2	116 x 135	
	340	**53**	**7**	**21**	**383**	**2.3**	**55**	**3**	**100 x 175**	
	350	**43**	**6**	**18**	**394**	**3.9**	**70**	**2.8**	**88.5 x 225**	
	360	**47**	**8**	**24**	**405**	**2.5**	**80**	**3.6**	**140 x 95**	136 x 95
	370	66	10	30	416	1.5	45	3.1	116 x 145	
	390	54	8	24	439	2.7	60	2.6	100 x 197	
	400	45	8	24	450	2.9	90	3.3	140 x 106	136 x 106
	410	66	10	30	461	1.7	50	2.8	116 x 159	
		53	**8**	**24**	**518**	**3.1**	**70**	**2.3**	**100 x 225**	
	460	**86**	**15**	**45**	**518**	**1**	**40**	**2.8**	**140 x 125**	136 x 125
	470	**66**	**10**	**30**	**529**	**1.8**	**55**	**2.5**	**116 x 175**	
	480	45	8	24	540	3.3	100	3	140 x 120	

Rated Voltage U_R Surge Voltage Us Ripple Voltage U_r (V_{DC} / V)	Capa-citance C_N (μF)	Maximum Ripple Current (rms) I max (A)	Maximum Peak Current ↑ ↑ [kA]	Maximum Surge Current I_S (kA)	Charge Energy W W (J)	Equivalent Series Resistance ESR (mΩ)	Equivalent Series Inductance ESL (nH)	Thermal Resistance R_{th} (K/W)	Size DØ x L1 (mm)	Remark
	510	85	16	48	574	1	40	2.6	140 x 135	
	540	65	10	30	608	2.1	60	2.3	116 x 197	
	570	85	16	48	641	1.1	45	2.5	140 x 145	
		65	**10**	**30**	**720**	**2.4**	**70**	**2**	**116 x 225**	
UR:1500 VDC	**640**	84	16	48	720	1.2	50	2.3	140 x 159	
Us:2250 V	**720**	**84**	**15**	**45**	**810**	**1.4**	**55**	**2.1**	**140 x 175**	136 X 175
Ur:350 V	750	64	10	30	844	2.9	85	1.7	116 x 265	
	810	83	15	45	911	1.5	60	1.9	140 x 197	
		82	16	48	1080	1.8	70	1.7	136 x 225	
	960	**82**	**16**	**48**	**1080**	**1.8**	**70**	**1.7**	**140 x 225**	136 x 225

※ Possible case diameter(mm) : 63Ø, 76Ø, 86Ø, 96Ø, 116Ø, 136Ø

LIFETIME EXPECTANCY vs HOT SPOT TEMPERATURE AND VOLTAGE



Vw: permanent working or operating voltage.

PROTECTION AGAINST OVER VOLTAGES

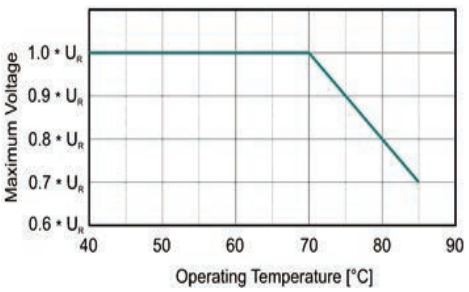
Maximum over voltage

1.1 x Un	30% of the service period(on-load duration)
1.15 x Un	30 min/d
1.2 x Un	5 min/d
1.3 x Un	5 min/d
1.3 x Un	100ms no more than 1000 times

▶ Imax Multiplier / Voltage & Operating Temperature range

V		0.7 U_R	0.8 U_R	0.9 U_R	1.0 U_R
I_{max} multiplier at T_a natural convection	50°C	1.32	1.22	1.11	1
	60°C	1.11	1	0.86	0.7
	70°C	0.86	0.7	0.5	0
	75°C	0.7	0.5	0	
	80°C	0.5	0		
	85°C	0			

▶ Max. Voltage at operating Temperature



DAEDONG CAPACITOR CO., LTD.

DC-Link Capacitors

DAL-DP Series

Metallized Polypropylene Film Capacitor

■ Applications

High power DC filtering applications,
The low inductance internal construction utilizes low loss metallized polypropylene for high ripple current capability

- Electric vehicle power inverters
- Wind power inverters and motor drives.

■ Characteristics

- Low Inductance
- Low ESR
- High Ripple Current
- High Voltage Rating
- Low Profile
- Reference standard : IEC 61071

■ Construction Details

- Case Material : Plastic UL94V-0
- Resin Materia : Dry Resin UL94V-0
- Terminal Material : Tin coating Brass

■ Specifications

Rated Voltage	500VDC - 1100VDC.
Capacitance Range	68μF ~ 500μF
Capacitance Tolerance	J(±5%), K(±10%)
Dissipation Factor	≤0.002 at 1000Hz, at 25 °C
Operating temperature range	-40 ~ +85°C
Withstanding voltage Between terminals	Rated Voltagex1.5Vdc, 10sec, at 25°C
Withstanding voltage Between terminal to case	3000Vac, at 60Hz for 60sec
Life Expectancy	100,000 hours at Un, @ 70°C
Reference Standard	IEC 61071, GB/T 17702

■ Drawing

Terminal Torque: 4.5N.m Max(A), 6.0N.m Max(B)

Fig1) Terminal B

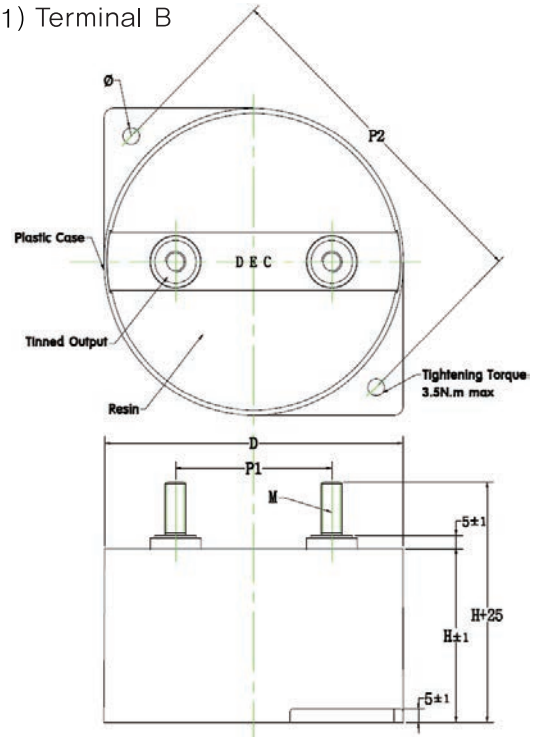
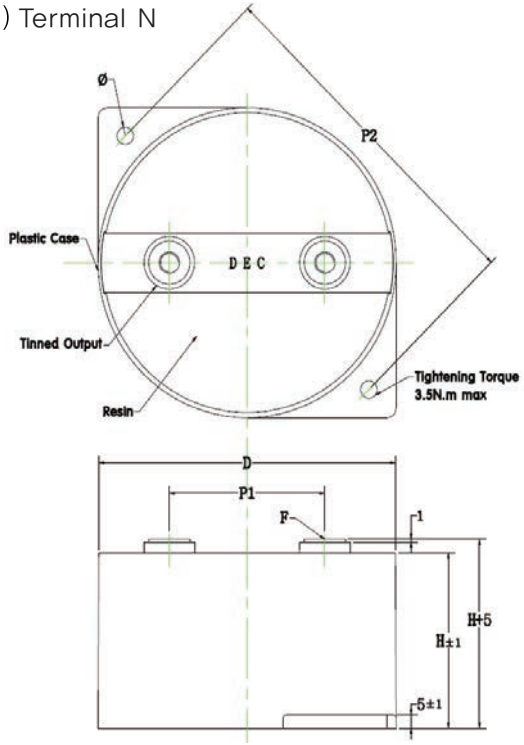


Fig2) Terminal N



* Upon your request, it is possible to produce other modified products beside above rating & dimensions.

DC-Link Capacitors

DAL-DP Series

Metallized Polypropylene Film Capacitor

■ Dimension Table : Standard Capacitor Values(Odering codes : DAL-DP)

Working Voltage(Un) 500 VDC

Rated Capacitance MFD	Case Dimension(mm) ΦD	H	P1	P2	Φ Bottom	DV/DT V/μ Sec	Irms Max at 10KHz & 55℃ Amps	ESR Typical at 10KHz mΩ	ESL Typical Ls nH	Themal Resistance R_{th} KW	Remark (Terminal Style)
125	87	51	45	101	5.5	37	90	0.7	25	6.8	M8*20(B)/M6*8(N)
200	87	51	45	101	5.5	25	90	0.8	32	5.9	M8*20(B)/M6*8(N)
275	87	65	45	101	5.5	16	90	0.9	40	5.0	M8*20(B)/M6*8(N)
350	115	51	60	133	6.5	25	100	0.6	32	4.1	M10*20(B)/M8*8(N)
400	87	75	45	101	5.5	8	60	1.1	40	4.1	M8*20(B)/M6*8(N)
500	115	65	60	133	6.5	26	100	0.7	40	3.5	M10*20(B)/M8*8(N)

Working Voltage(Un) 600 VDC

Rated Capacitance MFD	Case Dimension(mm) ΦD	H	P1	P2	Φ Bottom	DV/DT V/μ Sec	Irms Max at 10KHz & 55℃ Amps	ESR Typical at 10KHz mΩ	ESL Typical Ls nH	Themal Resistance R_{th} KW	Remark (Terminal Style)
100	87	51	45	101	5.5	40	80	0.8	25	6.8	M8*20(B)/M6*8(N)
150	87	51	45	101	5.5	27	80	0.9	32	5.9	M8*20(B)/M6*8(N)
220	87	65	45	101	5.5	18	80	1.1	40	5.0	M8*20(B)/M6*8(N)
300	115	51	60	133	6.5	27	100	0.6	32	4.1	M10*20(B)/M8*8(N)
470	115	65	60	133	6.5	18	100	0.7	40	3.5	M10*20(B)/M8*8(N)

Working Voltage(Un) 700 VDC

Rated Capacitance MFD	Case Dimension(mm) ΦD	H	P1	P2	Φ Bottom	DV/DT V/μ Sec	Irms Max at 10KHz & 55℃ Amps	ESR Typical at 10KHz mΩ	ESL Typical Ls nH	Themal Resistance R_{th} KW	Remark (Terminal Style)
100	87	51	45	101	5.5	48	90	0.6	25	6.8	M8*20(B)/M6*8(N)
150	87	51	45	101	5.5	32	90	0.7	32	5.9	M8*20(B)/M6*8(N)
220	87	65	45	101	5.5	21	85	0.9	40	5.0	M8*20(B)/M6*8(N)
250	115	51	60	133	6.5	32	100	0.6	32	4.1	M10*20(B)/M8*8(N)
350	115	65	60	133	6.5	21	100	0.7	40	3.5	M10*20(B)/M8*8(N)
370	87	75	45	101	5.5	8	60	1.3	40	4.2	M8*20(A)/M6*8(B)

Working Voltage(Un) 900 VDC

Rated Capacitance MFD	Case Dimension(mm) ΦD	H	P1	P2	Φ Bottom	DV/DT V/μ Sec	Irms Max at 10KHz & 55℃ Amps	ESR Typical at 10KHz mΩ	ESL Typical Ls nH	Themal Resistance R_{th} KW	Remark (Terminal Style)
68	87	51	45	101	5.5	56	80	0.8	25	6.8	M8*20(B)/M6*8(N)
100	87	51	45	101	5.5	37	80	0.9	32	5.9	M8*20(B)/M6*8(N)
140	87	65	45	101	5.5	25	80	1.2	40	5.0	M8*20(B)/M6*8(N)
200	115	51	60	133	6.5	37	100	0.6	32	4.1	M10*20(B)/M8*8(N)
300	115	65	60	133	6.5	25	100	0.7	40	3.5	M10*20(B)/M8*8(N)

Working Voltage(Un) 1100 VDC

Rated Capacitance MFD	Case Dimension(mm) ΦD	H	P1	P2	Φ Bottom	DV/DT V/μ Sec	Irms Max at 10KHz & 55℃ Amps	ESR Typical at 10KHz mΩ	ESL Typical Ls nH	Themal Resistance R_{th} KW	Remark (Terminal Style)
47	87	51	45	101	5.5	73	75	0.9	25	6.8	M8*20(B)/M6*8(N)
68	87	51	45	101	5.5	49	75	1.1	32	5.9	M8*20(B)/M6*8(N)
100	87	65	45	101	5.5	33	70	1.4	40	5.0	M8*20(B)/M6*8(N)
125	115	51	60	133	6.5	49	100	0.7	32	4.1	M10*20(B)/M8*8(N)
180	115	65	60	133	6.5	33	100	0.9	40	3.5	M10*20(B)/M8*8(N)

* Upon your request, it is possible to produce other modified products beside above rating & dimensions.
* Customer designed capacitors are available on request.

DAEDONG CAPACITOR CO., LTD.

DC-Link Capacitors

DMF-SD Series

Metallized Polypropylene Film Capacitor

■ Applications

This series combines high capacitance and very high ripple current capability needed for today's in verter designs for medium power wind, solar, fuel cells, UPS systems and more.

- Renewable energies inverters
- UPS
- PCB(Bus bar) Mount
- Battery chargers
- Motor drives

■ Characteristics

- High capacitance
- High Ripple Current
- High Voltage Rating
- Self-healing

■ Construction Details

- Case Material : Plastic UL94V-0
- Resin Materia : Dry Resin UL94V-0
- Terminal Material : Tin coating Brass

■ Specifications

Rated Voltage	500VDC - 1300VDC.
Capacitance Range	1μF ~ 120μF
Capacitance Tolerance	J(±5%), K(±10%)
Dissipation Factor	≤0.002 at 1000Hz, at 25 °C
Operating temperature range	-40 ~ +85℃
Withstanding voltage Between terminals	Rated Voltagex1.5Vdc, 10sec, at 25℃
Withstanding voltage Between terminal to case	3000Vac, at 60Hz for 60sec
Life Expectancy	100,000 hours at Un, @ 70°C
Reference Standard	IEC 61071, GB/T 17702

■ Drawing

Fig1)Terminal A : CF

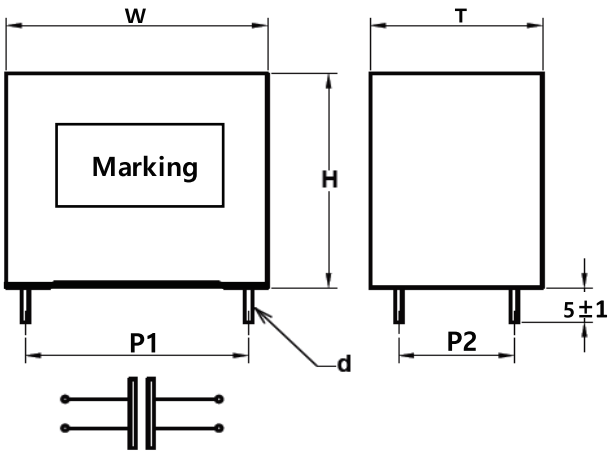
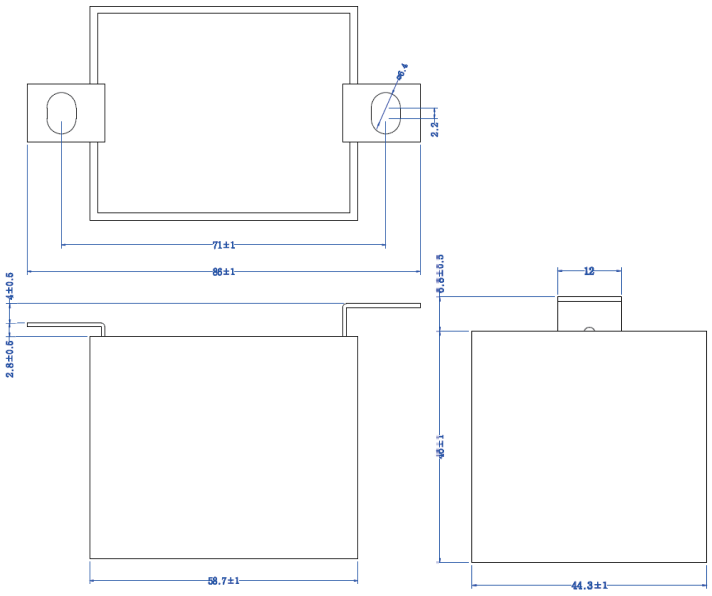


Fig2)Terminal B : LI, LT



* Upon your request, it is possible to produce other modified products beside above rating & dimensions.

DC-Link Capacitors

DMF-SD Series

Metallized Polypropylene Film Capacitor

■ Dimension Table : Standard Capacitor Values(Odering codes : DMF-SDL)

Working Voltage(Un) 500 VDC

Rated Capacitance MFD	Case Dimension(mm)						DV/DT V/μ Sec	Irms Max at 10KHz & 55℃ Amps	ESR Typical at 10-50KHz mΩ	tanδ 10KHz ≤10-4	Remark (Terminal Style)
	W	T	H	P1	P2	D Φ					
25	42.5	28	37	37.5	10.2	1.2	20	10	6.0	200	4pin(A)/Lug(B)
75	57.5	35	50	52.5	20.3	1.2	10	15	5.0	400	4pin(A)/Lug(B)
100	57.5	35	50	52.5	20.3	1.2	10	19	3.0	500	4pin(A)/Lug(B)
110	57.5	42.5	56	52.5	20.3	1.2	10	19	2.5	500	4pin(A)/Lug(B)
120	57.5	42.5	56	52.5	20.3	1.2	10	19	2.5	500	4pin(A)/Lug(B)

Working Voltage(Un) 600 VDC

Rated Capacitance MFD	Case Dimension(mm)						DV/DT V/μ Sec	Irms Max at 10KHz & 55℃ Amps	ESR Typical at 10-50KHz mΩ	tanδ 10KHz ≤10-4	Remark (Terminal Style)
	W	T	H	P1	P2	D Φ					
25	42.5	28	37	37.5	10.2	1.2	25	13	6.0	140	4pin(A)/Lug(B)
65	57.5	35	50	52.5	20.3	1.2	14	20	3.5	300	4pin(A)/Lug(B)
75	57.5	35	50	52.5	20.3	1.2	14	21	3.5	300	4pin(A)/Lug(B)
90	57.5	42.5	56	52.5	20.3	1.2	14	22	3.0	300	4pin(A)/Lug(B)
100	57.5	42.5	56	52.5	20.3	1.2	14	23	2.5	300	4pin(A)/Lug(B)

Working Voltage(Un) 700 VDC

Rated Capacitance MFD	Case Dimension(mm)						DV/DT V/μ Sec	Irms Max at 10KHz & 55℃ Amps	ESR Typical at 10-50KHz mΩ	tanδ 10KHz ≤10-4	Remark (Terminal Style)
	W	T	H	P1	P2	D Φ					
22	42.5	28	37	37.5	10.2	1.2	21	11	5.4	120	4pin(A)/Lug(B)
55	57.5	35	50	52.5	20.3	1.2	14	17	4.4	240	4pin(A)/Lug(B)
90	57.5	42.5	56	52.5	20.3	1.2	14	22	3.8	240	4pin(A)/Lug(B)

Working Voltage(Un) 900 VDC

Rated Capacitance MFD	Case Dimension(mm)						DV/DT V/μ Sec	Irms Max at 10KHz & 55℃ Amps	ESR Typical at 10-50KHz mΩ	tanδ 10KHz ≤10-4	Remark (Terminal Style)
	W	T	H	P1	P2	D Φ					
15	42.5	28	37	37.5	10.2	1.2	30	11	6.0	120	4pin(A)/Lug(B)
40	57.5	35	50	52.5	20.3	1.2	20	17	5.0	220	4pin(A)/Lug(B)
50	57.5	35	50	52.5	20.3	1.2	18	18	4.5	220	4pin(A)/Lug(B)
55	57.5	42.5	56	52.5	20.3	1.2	18	19	4.0	220	4pin(A)/Lug(B)
60	57.5	42.5	56	52.5	20.3	1.2	18	20	3.5	220	4pin(A)/Lug(B)

Working Voltage(Un) 1100 VDC

Rated Capacitance MFD	Case Dimension(mm)						DV/DT V/μ Sec	Irms Max at 10KHz & 55℃ Amps	ESR Typical at 10-50KHz mΩ	tanδ 10KHz ≤10-4	Remark (Terminal Style)
	W	T	H	P1	P2	D Φ					
10	42.5	28	37	37.5	10.2	1.2	39	10	7.5	190	4pin(A)/Lug(B)
25	57.5	42.5	56	52.5	20.3	1.2	26	14	9.0	190	4pin(A)/Lug(B)
40	57.5	42.5	56	52.5	20.3	1.2	26	20	5.0	190	4pin(A)/Lug(B)

Working Voltage(Un) 1200 VDC

Rated Capacitance MFD	Case Dimension(mm)						DV/DT V/μ Sec	Irms Max at 10KHz & 55℃ Amps	ESR Typical at 10-50KHz mΩ	tanδ 10KHz ≤10-4	Remark (Terminal Style)
	W	T	H	P1	P2	D Φ					
7	42.5	28	37	37.5	10.2	1.2	40	9	12.0	80	4pin(A)/Lug(B)
25	57.5	42.5	56	52.5	20.3	1.2	20	15	6.0	160	4pin(A)/Lug(B)
30	57.5	42.5	56	52.5	20.3	1.2	20	16	5.0	160	4pin(A)/Lug(B)

* Upon your request, it is possible to produce other modified products beside above rating & dimensions.
* Customer designed capacitors are available on request.

DAEDONG CAPACITOR CO., LTD.

Conduction-cooled Power Capacitors

DHF-SM/SP Series

Polypropylene Film Capacitor

■ Applications

DHF-SP/SM Series capacitors are apply to
Low to high frequency 51KHz to 995KHz,400 to 1000Vrms
200 to 1000Arms, 150 to 400Kvar induction heating
installations for L-C resonant circuit.
This model cooled flowing through
rectangular-shapped outside copper electride connected,
and conduction -cooled by bus bar.

■ Characteristics

- Dielectric film : Polypropylene film , Self-healing Property
- Electrode material : Aluminium foil and Metallized Polypropylene film.
- Outside electrode material : rectangular-shapped copper
- Winding construction : Non-inductive extended foil(Low Inductance),Polypropylene film, alumium foil plus metallized polypropylene film wound combinnation.
- Sealing Material : Epoxy resin UL 94 V-O
- Element insulation : imbueing by high-BDV insulating oil

■ Specifications

Sinusoidal Voltage	400~1000 Vrms
Max Current	200~1000 Arms
Capacitance Range	0.05μF ~ 5μF
Capacitance Tolerance	nominal values (μF)±10%
Max Power	150~400 Kvar
Frequency Range at.Full Power	50~995 KHz
Max Frequency	700~1000 KHz
Stray Inductance	< 3~5
Operating Temperature	-40 ~ +65℃
Loss- factor	≤0.005 at 1KHz and 25℃

- Reference standard : IEC 6011 0-1

Patented R .O Korea 대한민국 특허 출원 .등록제품

Conduction-cooled Power Capacitors

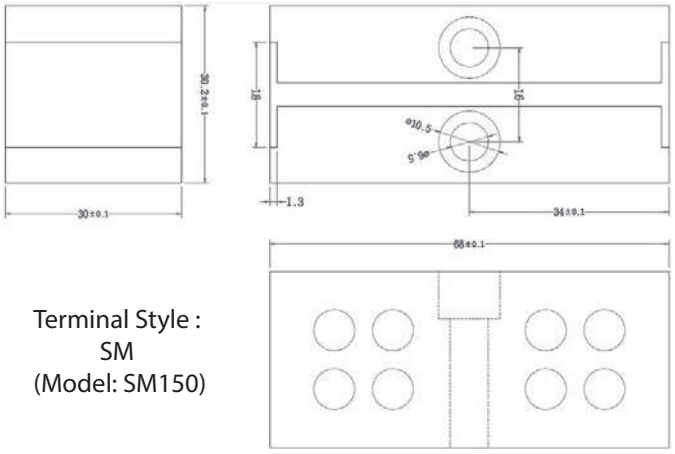
DHF-SM/SP Series

Polypropylene Film Capacitor

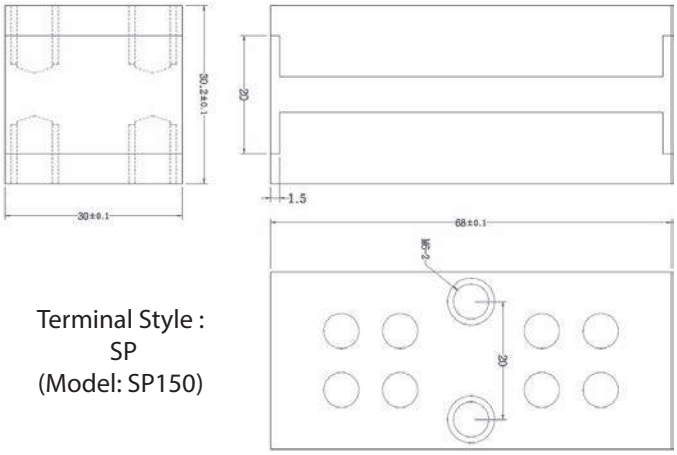
■ Drawing

MODEL:DHF-SP150,SP150/200

A Type



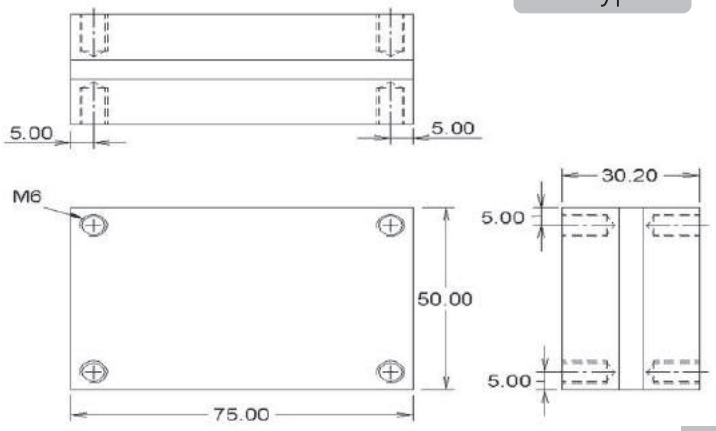
Terminal Style :
SM
(Model: SM150)



Terminal Style :
SP
(Model: SP150)

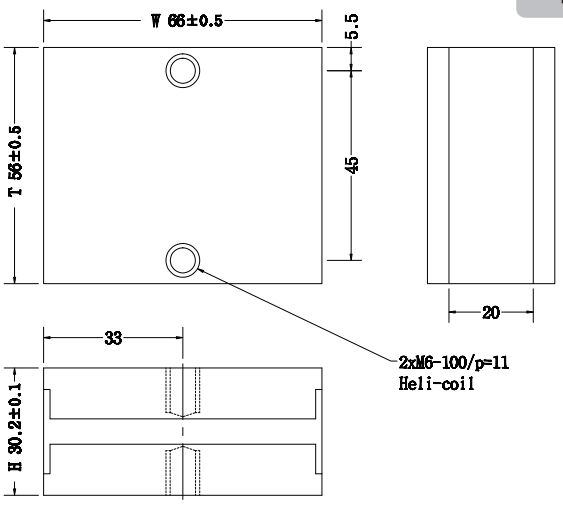
MODEL:DHF-SP180/300

B Type



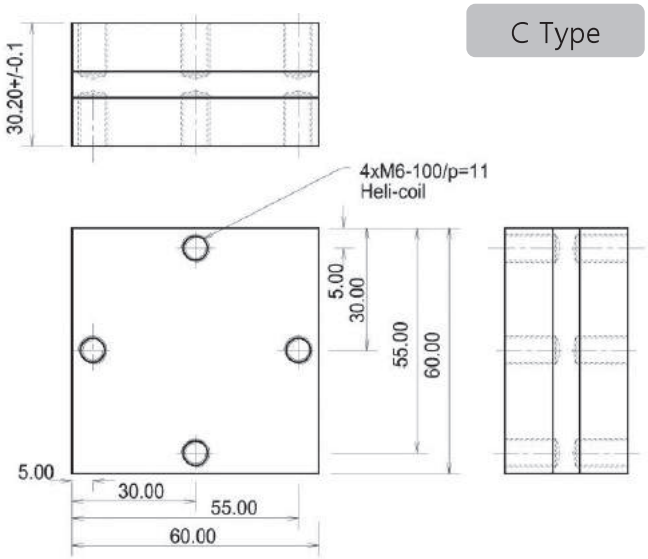
MODEL:DHF-SP405A

D Type



MODEL:DHF-SP305B

C Type



Patented R .O Korea 대한민국 특허 출원 .등록 제품

DAEDONG CAPACITOR CO., LTD.

Conduction-cooled Power Capacitors

DHF-SP Series

Polypropylene Film Capacitor

■ Rating & Dimensions Table :Nominal Values

Patented R .O Korea 대한민국 특허 출원 .등록 제품

Model	Dimensions		Capacit-ance	Sinus-odial Voltage	Peak Voltage	Max Current	Max Power	Frequency Range at.Full Power	Freq Limit	Stray Inductance
	Type	L×W×H(mm)	(㎌±10%)	(V rms)	($\hat{V}$)	(A rms)	(Kvar)	(KHz)	(KHz)	(nH)
DHF-SP150	A	68×30×30.2	0.05	1000	1410	200	150	477-700	700	< 3
			0.1	1000	1410	200		239-424	700	< 3
			0.17	700	990	250		287-390	700	< 3
			0.33	700	990	250		148-201	700	< 3
			0.5	700	990	250		97-133	700	< 3
			0.66	600	850	300		100-145	700	< 3
			1.33	500	710	300		72-72	700	< 3
			2.4	400	570	400		62-71	700	< 3
DHF-SP150/200	A	68×30×30.2	0.05	1000	1410	250	200	637-995	1000	< 3
			0.1	1000	1410	250		318-497	1000	< 3
			0.17	900	1270	300		231-421	1000	< 3
			0.33	800	1130	300		151-217	1000	< 3
			0.5	800	1130	350		99-195	1000	< 3
			0.66	700	990	400		98-193	1000	< 3
			1.33	600	850	450		66-121	1000	< 3
			2.4	450	640	500		65-83	1000	< 3
DHF-SP180/300	B	75×50×30.2	0.1	1000	1410	350	300	477-650	700	< 5
			0.2	1000	1410	400		239-424	700	< 5
			0.33	700	990	500		295-402	700	< 5
			0.66	700	990	500		148-201	700	< 5
			1	600	850	650		133-224	700	< 5
			1.3	600	850	650		102-172	700	< 5
			2.6	500	710	650		73-86	700	< 5
			5	400	570	800		60-68	700	< 5
DHF-SP305B	C	60×60×30.2	0.1	1000	1410	400	300	477-849	1000	< 5
			0.2	1000	1410	400		239-424	1000	< 5
			0.33	700	990	500		295-402	1000	< 5
			0.66	700	990	500		148-201	1000	< 5
			1	600	850	650		133-224	1000	< 5
			1.32	600	850	650		100-170	1000	< 5
			2.6	500	710	650		73-86	1000	< 5
			5	400	570	800		60-68	1000	< 5
DHF-SP405A	D	66×56×30.2	0.33	1000	1410	600	400	193-434	1000	< 5
			0.66	1000	1410	600		96-217	1000	< 5
			1.33	900	1270	850		59-216	1000	< 5
			2.6	700	990	950		50-138	1000	< 5
			5	500	710	1000		51-80	1000	< 5

Conduction-cooled Power Capacitors

DHF-SP Series

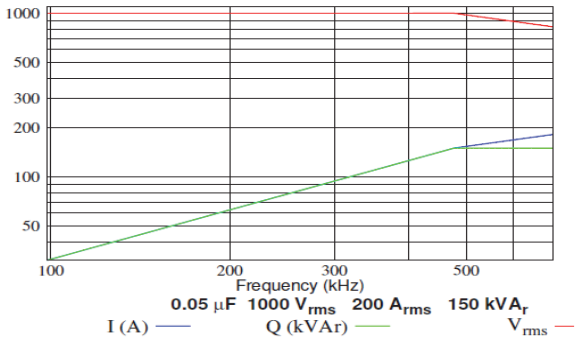
Polypropylene Film Capacitor

MODEL:DHF-SP150

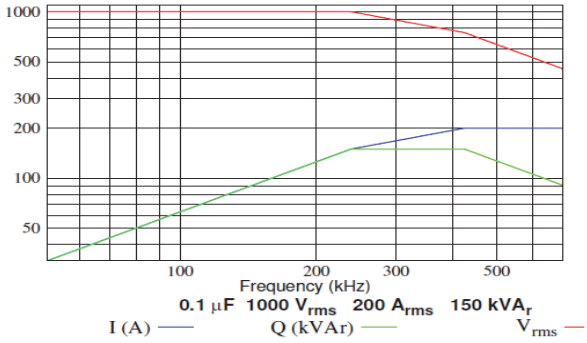
V rms , A rms , Q Kvar

■ Frequency VS Available Range (Vrms , A rms , Qkvar) Curve

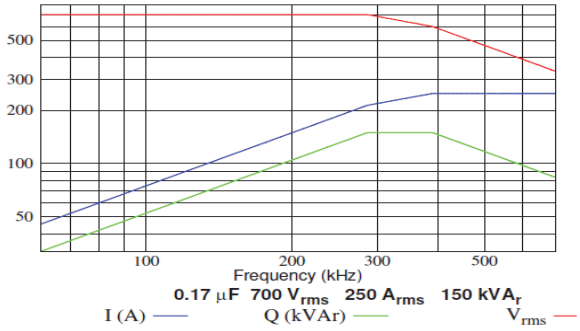
0.05㎌ 1000V , 190A , 150Kvar



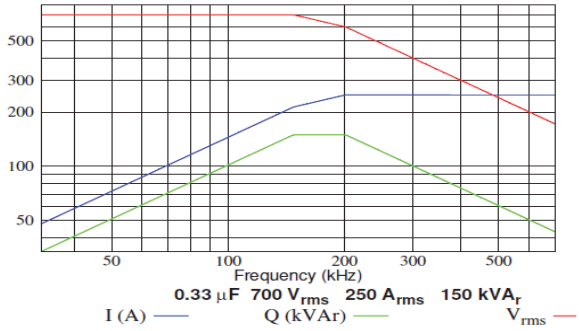
0.1㎌ 1000V , 200A , 150Kvar



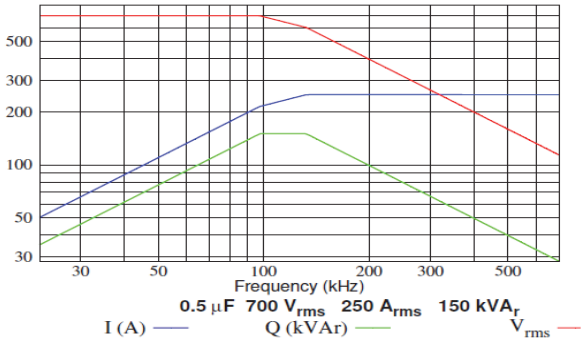
0.17㎌ 700V , 250A , 150Kvar



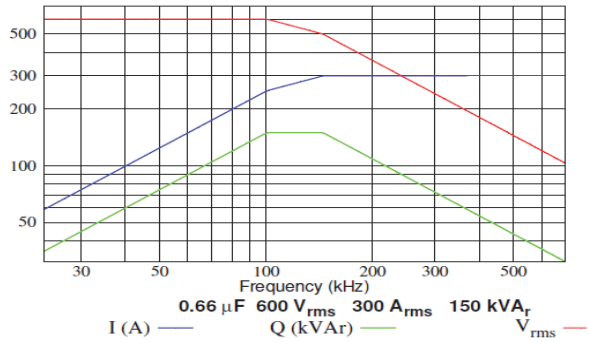
0.33㎌ 700V , 250A , 150Kvar



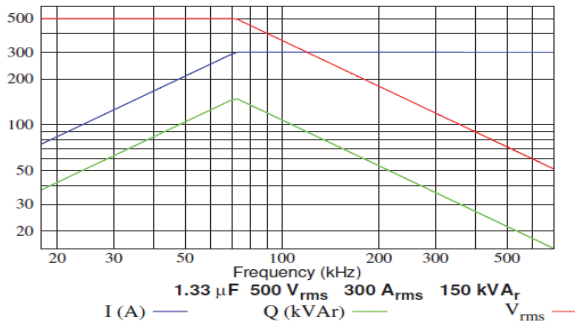
0.5㎌ 700V , 250A , 150Kvar



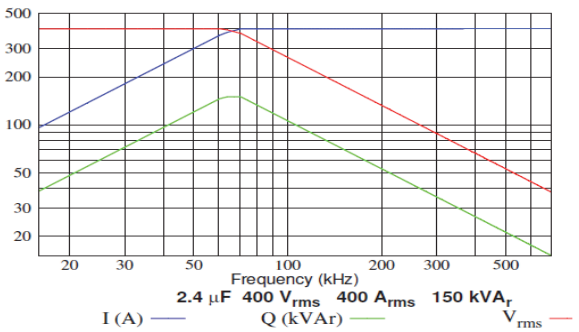
0.66㎌ 600V , 300A , 150Kvar



1.33㎌ 500V , 300A , 150Kvar



2.4㎌ 400V , 400A , 150Kvar



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DAEDONG CAPACITOR CO., LTD.

Conduction-cooled Power Capacitors

DHF-SP Series

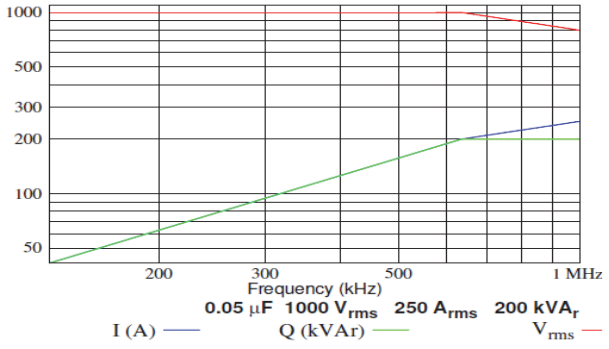
Polypropylene Film Capacitor

MODEL:DHF-SP150/200

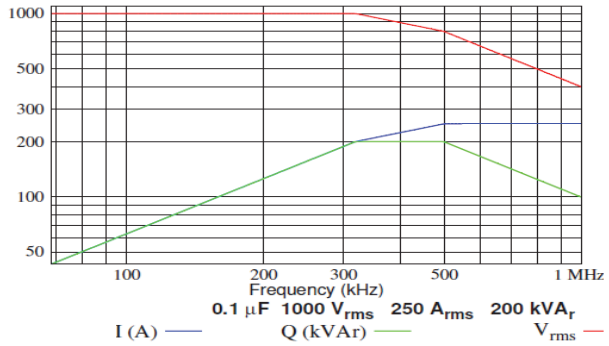
V rms , A rms , Q Kvar

■ Frequency VS Available Range (Vrms , A rms , Qkvar) Curve

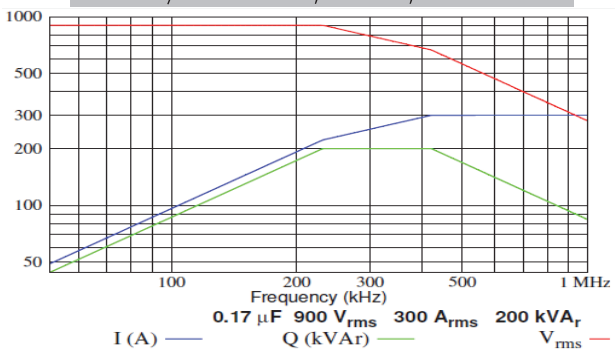
0.05㎌ 1000V , 250A , 200Kvar



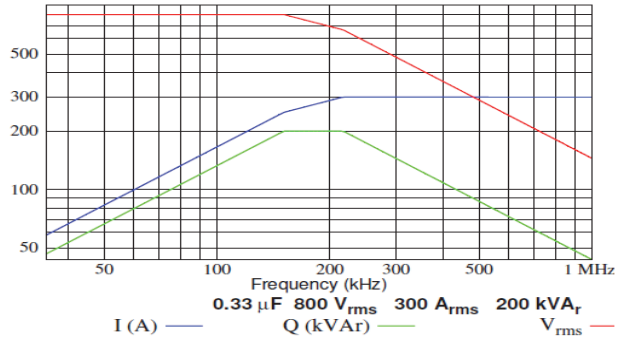
0.1㎌ 1000V , 250A , 200Kvar



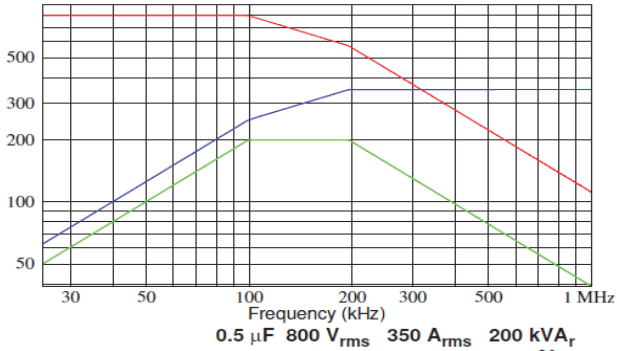
0.17㎌ 900V , 300A , 200Kvar



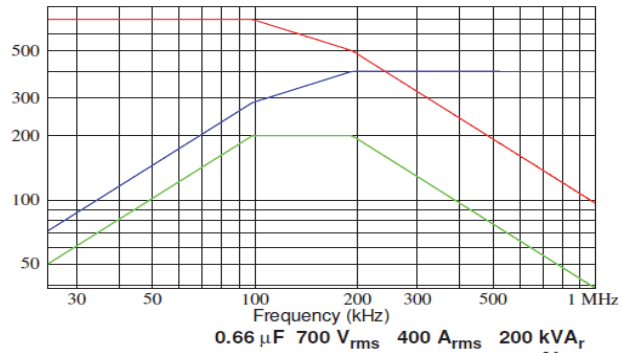
0.33㎌ 800V , 300A , 200Kvar



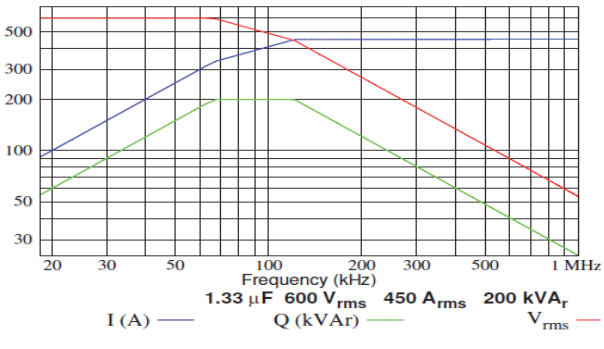
0.5㎌ 800V , 350A , 200Kvar



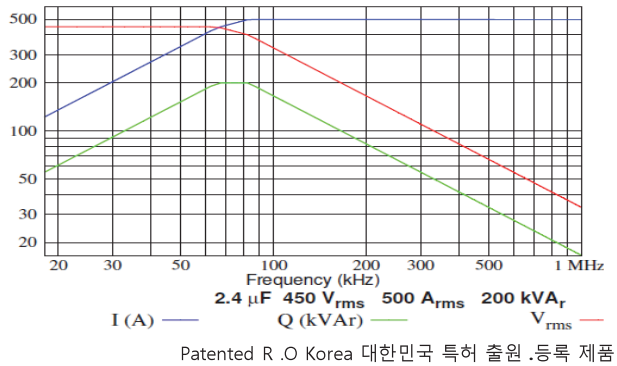
0.66㎌ 700V , 400A , 200Kvar



1.33㎌ 600V , 450A , 200Kvar



2.4㎌ 450V , 500A , 200Kvar



Patented R .O Korea 대한민국 특허 출원 .등록 제품

DAEDONG CAPACITOR CO., LTD.

Conduction-cooled Power Capacitors

DHF-SP Series

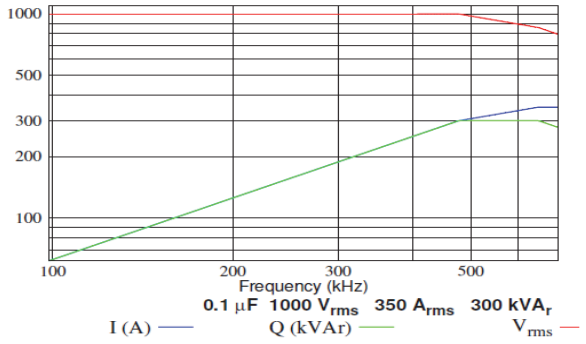
Polypropylene Film Capacitor

MODEL:DHF-SP180/300

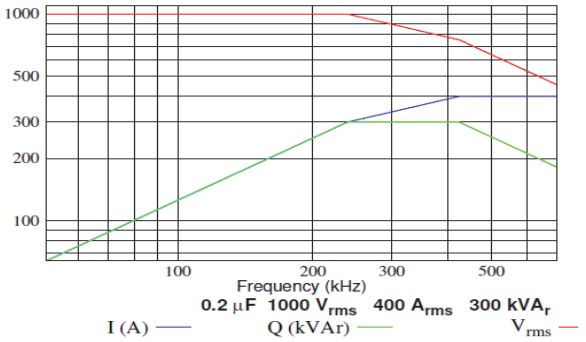
V rms , A rms , Q Kvar

■ Frequency VS Available Range (Vrms , A rms , Qkvar) Curve

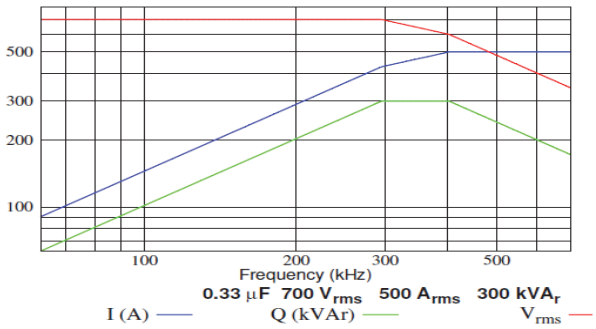
0.1㎌ 1000V , 350A , 300Kvar



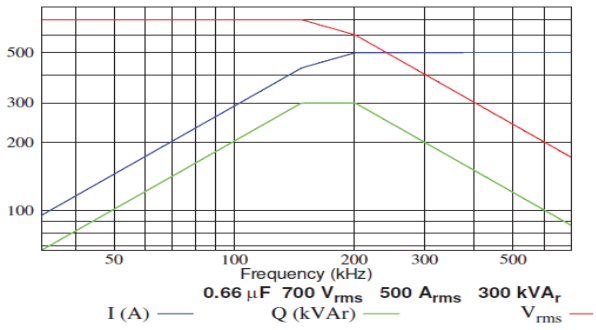
0.2㎌ 1000V , 400A , 300Kvar



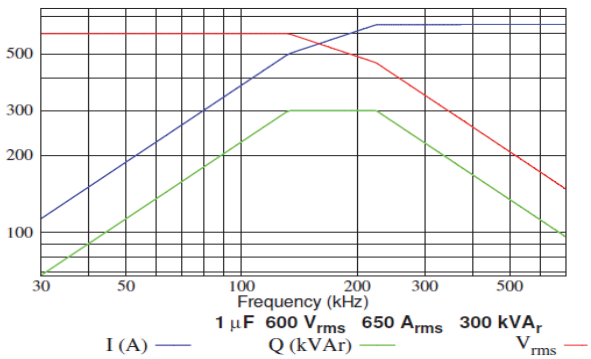
0.33㎌ 700V , 500A , 300Kvar



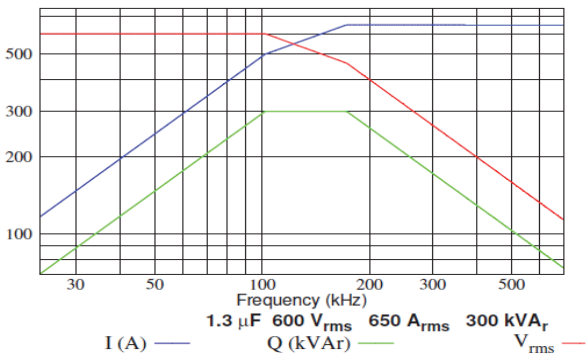
0.66㎌ 700V , 500A , 300Kvar



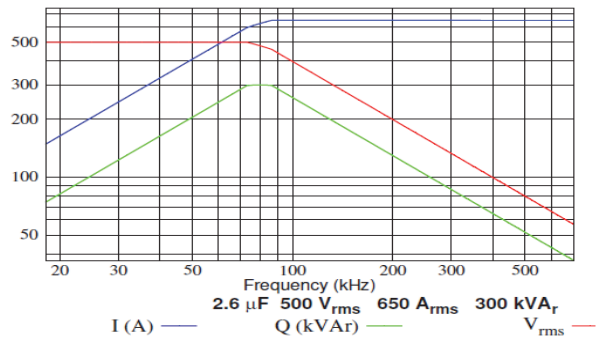
1㎌ 600V , 650A , 300Kvar



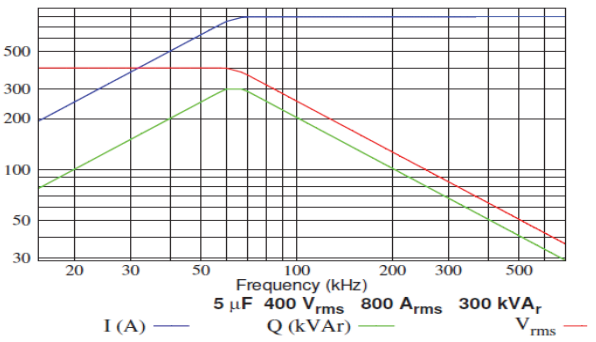
1.3㎌ 600V , 650A , 300Kvar



2.4㎌ 500V , 650A , 300Kvar



5㎌ 400V , 800A , 300Kvar



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DAEDONG CAPACITOR CO., LTD.

Conduction-cooled Power Capacitors

DHF-SP Series

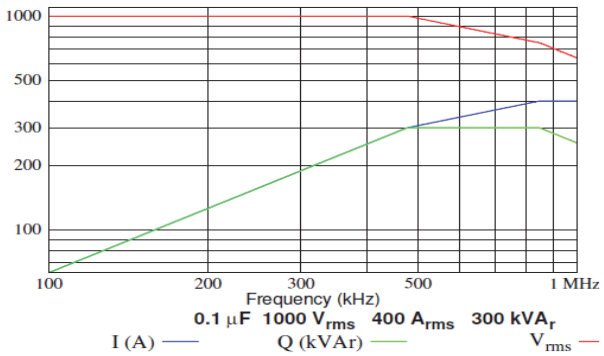
Polypropylene Film Capacitor

MODEL:DHF-SP 305B

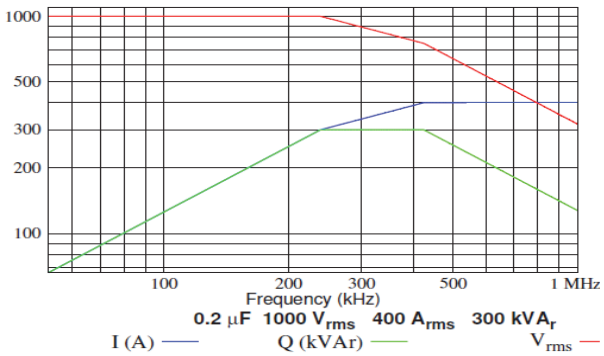
V rms , A rms , Q Kvar

■ Frequency VS Available Range (Vrms , A rms , Qkvar) Curve

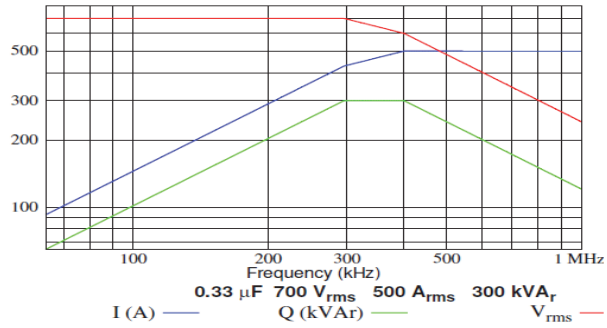
0.1㎌ 1000V , 400A , 300Kvar



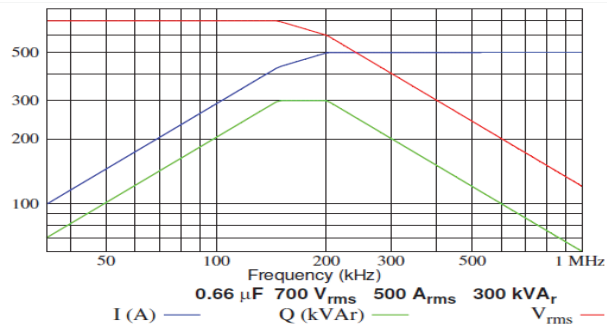
0.2㎌ 1000V , 400A , 300Kvar



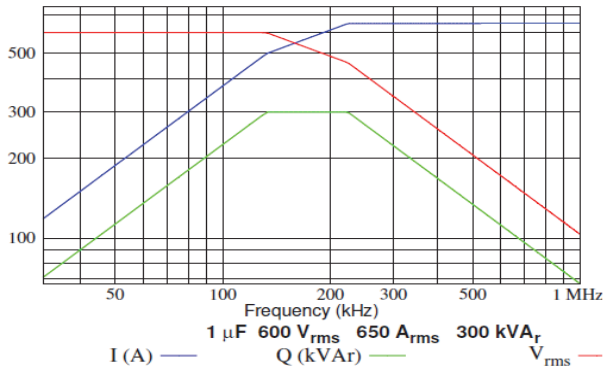
0.33㎌ 700V , 500A , 300Kvar



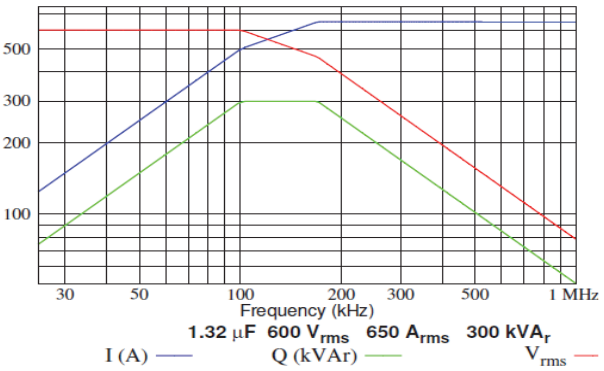
0.66㎌ 700V , 500A , 300Kvar



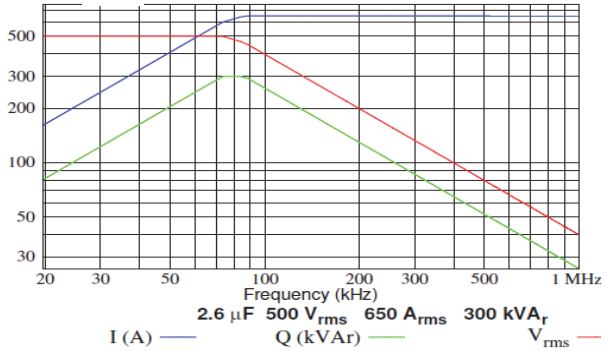
1㎌ 600V , 650A , 300Kvar



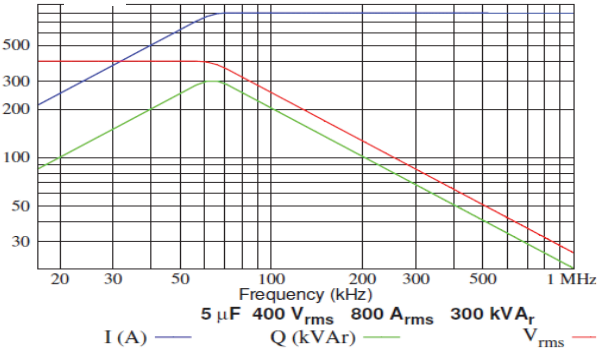
1.32㎌ 600V , 650A , 300Kvar



2.6㎌ 500V , 650A , 300Kvar



5㎌ 400V , 800A , 300Kvar



Patented R .O Korea 대한민국 특허 출원 .등록 제품

DAEDONG CAPACITOR CO., LTD.

Conduction-cooled Power Capacitors

DHF-SP Series

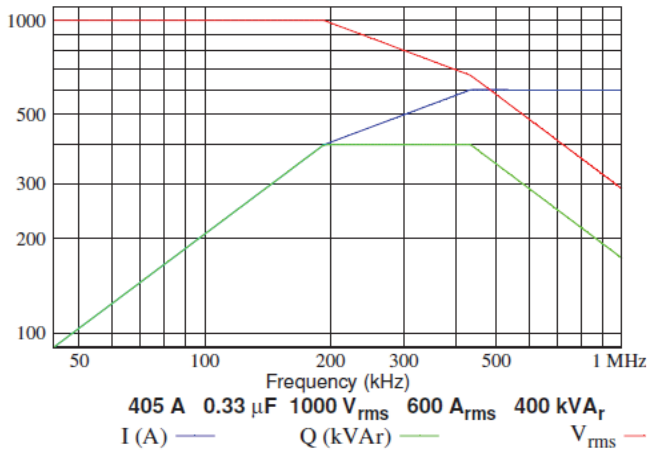
Polypropylene Film Capacitor

MODEL:DHF-SP 405A

V rms , A rms , Q Kvar

■ Frequency VS Available Range (Vrms , A rms , Qkvar) Curve

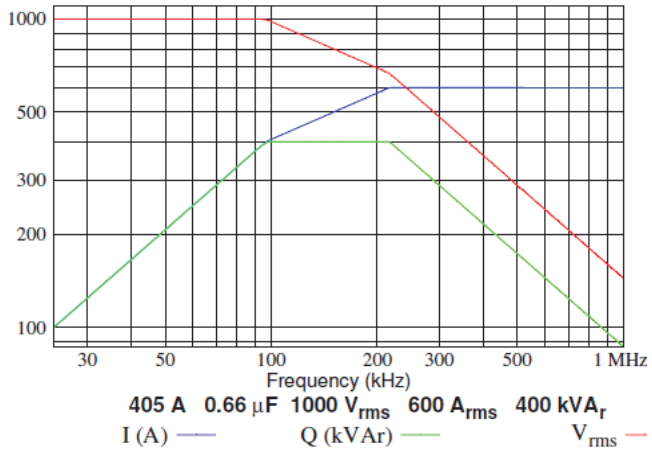
0.33㎌ 1000V , 600A , 400Kvar



405 A 0.33 µF 1000 V_{rms} 600 A_{rms} 400 kVA_r

I (A) Q (kVAr) V_{rms}

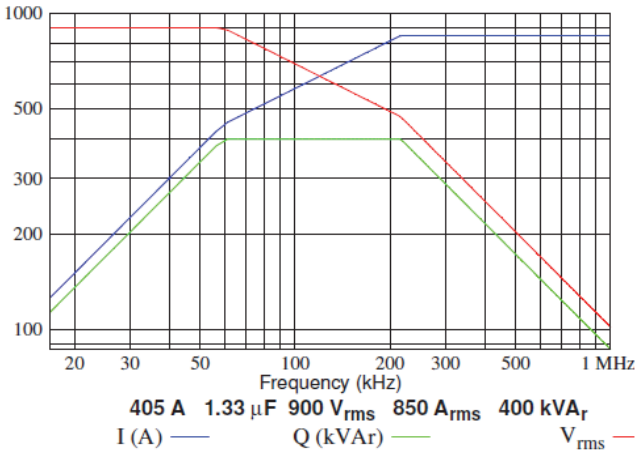
0.66㎌ 1000V , 600A , 400Kvar



405 A 0.66 µF 1000 V_{rms} 600 A_{rms} 400 kVA_r

I (A) Q (kVAr) V_{rms}

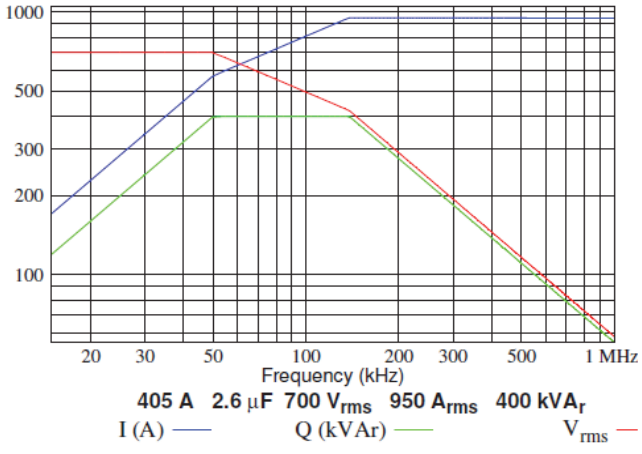
1.33㎌ 900V , 850A , 400Kvar



405 A 1.33 µF 900 V_{rms} 850 A_{rms} 400 kVA_r

I (A) Q (kVAr) V_{rms}

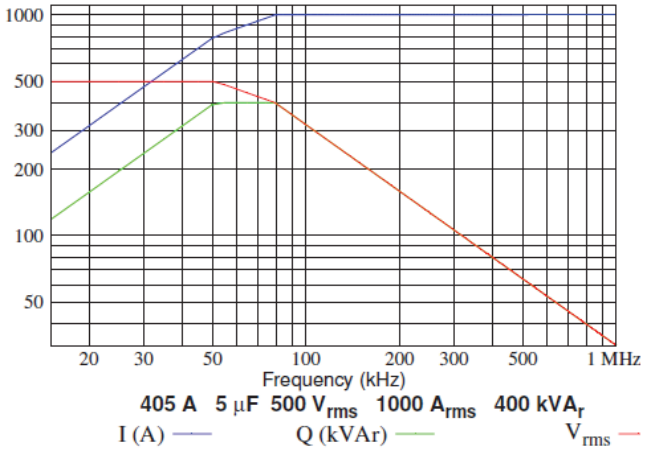
2.6㎌ 700V , 950A , 400Kvar



405 A 2.6 µF 700 V_{rms} 950 A_{rms} 400 kVA_r

I (A) Q (kVAr) V_{rms}

5㎌ 500V , 1000A , 400Kvar



405 A 5 µF 500 V_{rms} 1000 A_{rms} 400 kVA_r

I (A) Q (kVAr) V_{rms}

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DAEDONG CAPACITOR CO., LTD.

Conduction-cooled Power Capacitors

DHF-SP Series

Polypropylene Film Capacitor

Part Number Series : DHF-SM150/200, DHF-SP150/200

■ Characteristics

- This model cooled flowing through rectangular-shapped outside copper electride connected, and conduction -cooled by bus bar.
- Polypropylene dielectric, Self-healing
- Stray inductance < 3nH
- Maximum frequency 1000KHz
- Maximum operating core temperature 85℃
- Capacitance tolerance ±10%
- RoHS complint, Flame retardant UL94-V0

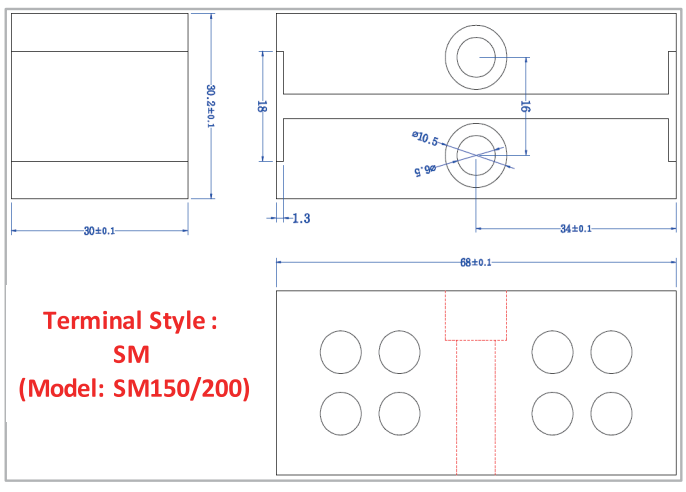
■ Applications

Induction Heating, Electric Cars, Medical Imaging, EV Wireless Chargers, Magnetisers & Traction Equipmen, LC Resonant Circuits, Wireless power transfer for high powers, Etc

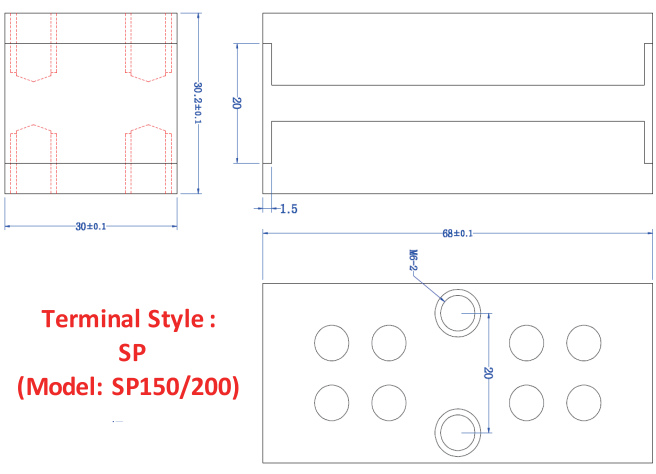
■ Specification

Norminal capacitance (μF) at 1KHz	Vmax Voltage Vrms	Peak Voltage Vpeak	Max current Irms	Max power Kvars	Frequency Range KHz	ESR max mΩ	ESL max nH	Dimensions mm				Termi nal Style
								W	T	H	P1	
0.05	1000	1410	250	200	636-994	1.5	3	68	30.2	30	16	SM/SP
0.1	1000	1410	250	200	318-498	1.2	3	68	30.2	30	16	SM/SP
0.17	900	1270	300	200	232-422	1	3	68	30.2	30	16	SM/SP
0.25	800	1130	300	200	199-286	0.9	3	68	30.2	30	16	SM/SP
0.33	800	1130	300	200	150-216	0.8	3	68	30.2	30	16	SM/SP
0.5	800	1130	350	200	98-194	0.6	3	68	30.2	30	16	SM/SP
0.66	700	990	400	200	98-193	0.4	3	68	30.2	30	16	SM/SP
1.2	600	850	450	200	74-134	0.4	3	68	30.2	30	16	SM/SP
1.33	600	850	450	200	65-120	0.4	3	68	30.2	30	16	SM/SP
2.4	450	640	500	200	65-85	0.3	3	68	30.2	30	16	SM/SP

■ Capacitor Drawing and Terminal Style



Terminal Style : SM (Model: SM150/200)



Terminal Style : SP (Model: SP150/200)

* Upon your request, it is possible to produce other modified products beside above rating & dimensions.

DAEDONG CAPACITOR CO., LTD.

Conduction-cooled Power Capacitors

DHF-D500T Series

Polypropylene Film Capacitor

■ Applications

DHF-D500T Series capacitors are apply to Medium frequency 9KHz to 82KHz, 500 to 1100Vrms 600 to 1000Arms, 500Kvar induction heating installations for L-C resonant circuit.
This model cooled flowing through round -shapped outside copper electride connected, and conduction -cooled by bus bar.

■ Characteristics

- Dielectric film : Polypropylene film , Self-healing Property
- Electrode material : Aluminium foil and Metallized Polypropylene film.
- Outside electrode material : round-shapped copper electrode.
- Winding construction : Non-inductive extended foil(Low Inductance),Polypropylene film, alumium foil plus metallized polypropylene film wound combinnation.
- Sealing Material : Epoxy resin UL 94 V-O
- Element insulation : imbueing by high-BDV insulating oil

■ Specifications

Sinusoidal Voltage	500~1100 Vrms
Max Current	600~1000 Arms
Capacitance Range	1.4μF ~ 37μF
Capacitance Tolerance	nominal values (μF)±10%
Max Power	500 Kvar
Frequency Range at.Full Power	9~82 KHz
Stray Inductance	< 10
Operating Temperature	-40 ~ +65℃
Loss- factor	≤0.005 at 1KHz and 25℃

- Reference standard : IEC 6011 0-1

Patented R .O Korea 대한민국 특허 출원 .등록 제품

DAEDONG CAPACITOR CO., LTD.

Conduction-cooled Power Capacitors

DHF-D500T Series

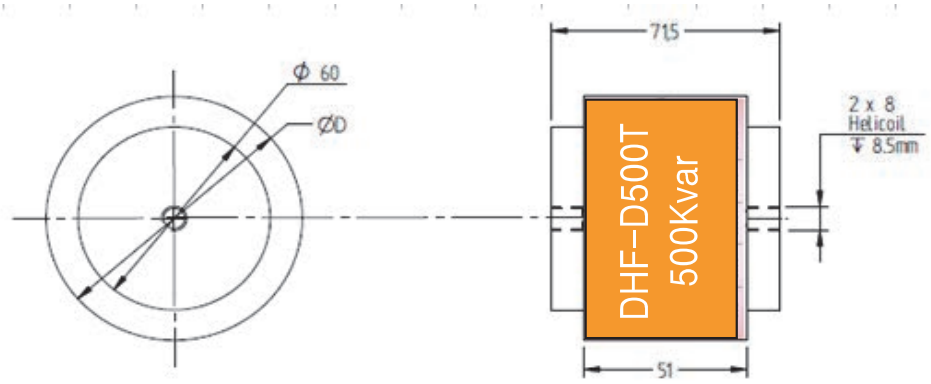
Polypropylene Film Capacitor

MODEL:DHF-D500T

■ Rating Table & Dimensions

Capacitance (μF ±10%)	1.4	3	4	6.3	8.5	10	21	27	37
Sinusoidal Voltage (V rms)	1100	750	900	700			500	550	500
Peak Voltage (V)	1560	1060	1270	990			710	780	710
Max Current (A rms)	600	800	700	1000					
Max Power (Kvar)	500								
Frwquency Range(KHz) at.Full Power kvar	47~82	47~68	25~39	26~51	19~37	16~32	15~15	10~12	9~9
Stray inductance(nH)	< 10								
Dimensions ØD (mm)	80Ø		101Ø	80Ø	88Ø	94Ø	80Ø	101Ø	

■Drawing



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Conduction-cooled Power Capacitors

DHF-D500T Series

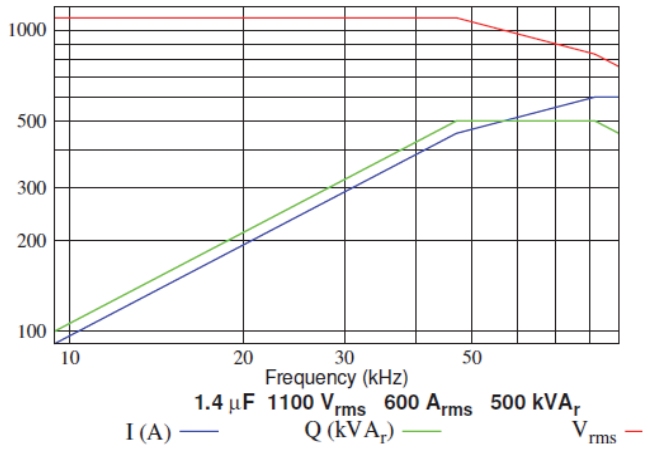
Polypropylene Film Capacitor

MODEL:DHF-D500T

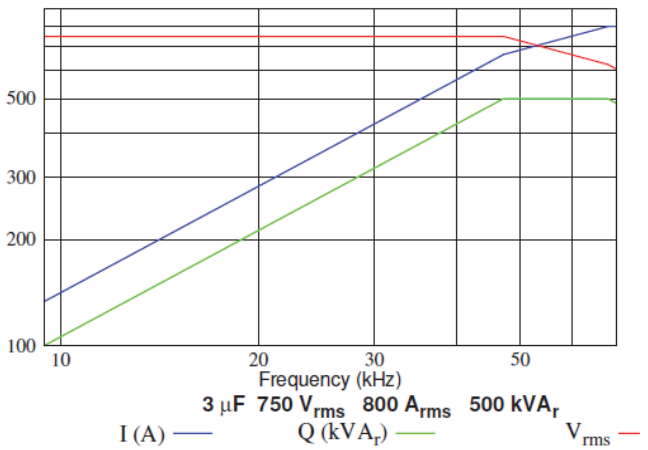
V rms , A rms , Q Kvar

■ **Frequency VS Available Range(Vrms , A rms , Qkvar) Curve**

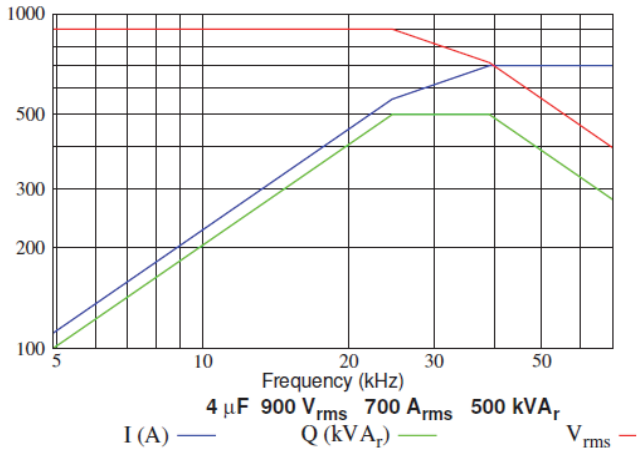
1.4μF 110V , 600A , 500Kvar



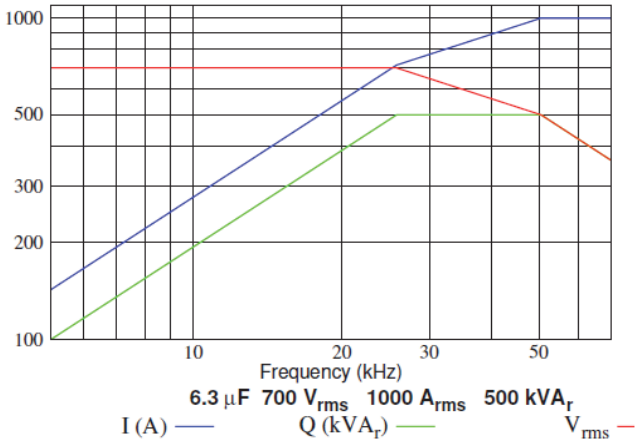
3μF 750V , 800A , 500Kvar



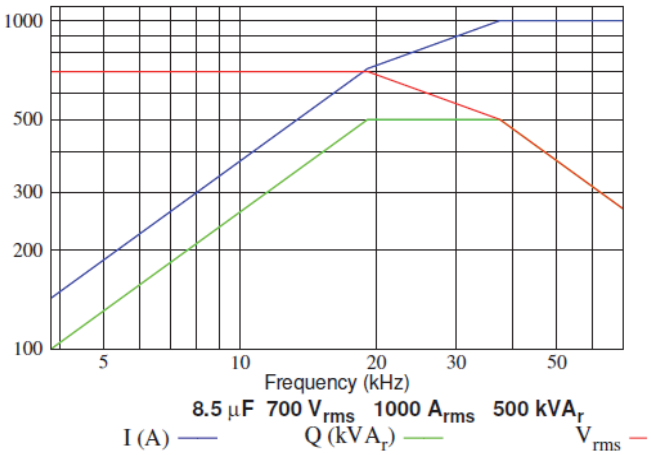
4μF 900V , 700A , 500Kvar



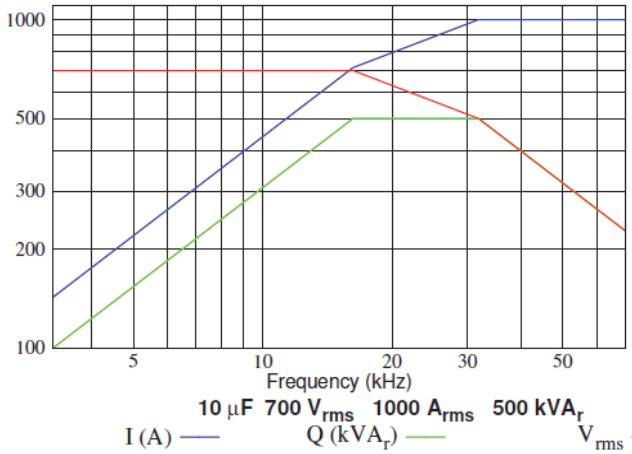
6.3μF 700V , 1000A , 500Kvar



8.5μF 700V , 1000A , 500Kvar



10μF 700V , 1000A , 500Kvar



Patented R .O Korea 대한민국 특허 출원 .등록 제품

Conduction-cooled Power Capacitors

DHF-D500T Series

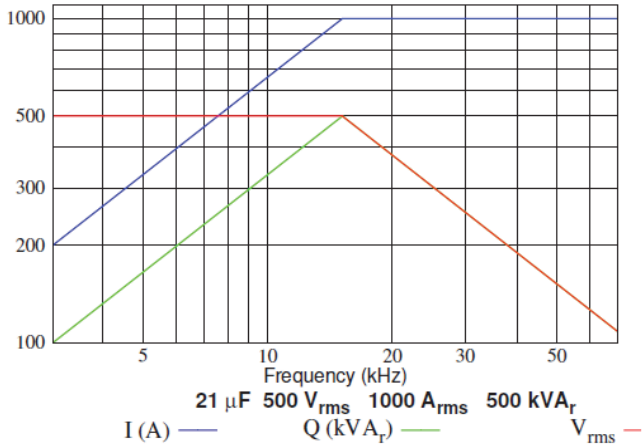
Polypropylene Film Capacitor

MODEL:DHF-D500T

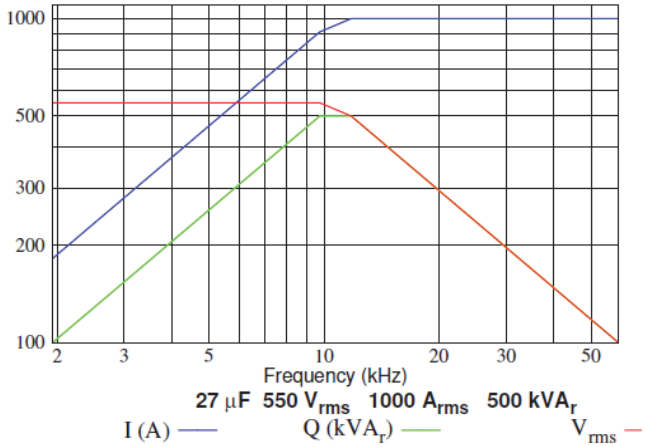
V rms , A rms , Q Kvar

■ **Frequency VS Available Range(Vrms , A rms , Qkvar) Curve**

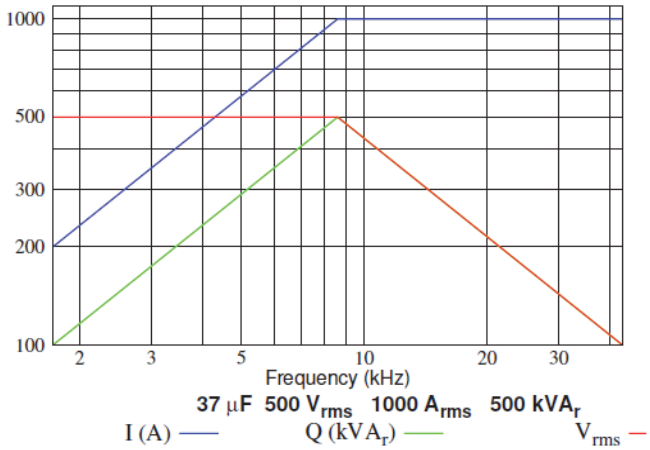
21μF 500V , 1000A , 500Kvar



27μF 550V , 1000A , 500Kvar



37μF 500V , 1000A , 500Kvar



Patented R .O Korea 대한민국 특허 출원 .등록 제품

Conduction-cooled Power Capacitors

DHF-S Series

Polypropylene Film Capacitor

Part Number DHF-S325 Series

■ Applications

DHF-S Series capacitors are apply to high -medium frequency 115KHz to 448KHz, 525 to 700Vrms 550 to 800Arms, 325 to 400Kvar induction heating installations for L-C resonant circuit.
This model cooled flowing through rectangular-shapped outside copper electride connected, and conduction -cooled by bus bar.

■ Characteristics

- Dielectric film : Polypropylene film , Self-healing Property
- Electrode material : Aluminium foil and Metallized Polypropylene film.
- Outside electrode material : rectangular-shapped outside copper electride .
- Winding construction : Non-inductive extended foil(Low Inductance),Polypropylene film, alumium foil plus metallized polypropylene film wound combinnation.
- Sealing Material : Epoxy resin UL 94 V-O
- Element insulation : imbueing by high-BDV insulating oil

■ Specifications

Sinusoidal Voltage	525~700 Vrms
Max Current	550~800 Arms
Capacitance Range	0.33μF ~ 2.0μF
Capacitance Tolerance	nominal values (μF)±10%
Max Power	325 to 400 Kvar
Frequency Range at.Full Power	115~448 KHz
Operating Temperature	-40 ~ +65℃
Loss- factor	≤0.001 at 1KHz and 25℃

- Reference standard : IEC 6011 0-1

Patented R .O Korea 대한민국 특허 출원 .등록 제품

Conduction-cooled Power Capacitors

DHF-S Series

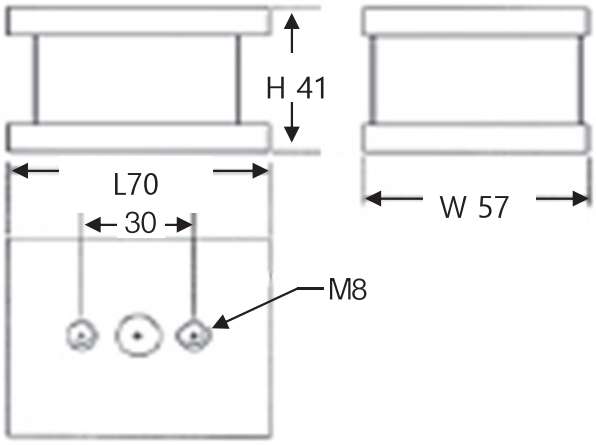
Polypropylene Film Capacitor

Part Number DHF-S325 Series

■ Rating Table & Dimensions

Model	DHF-S325 033M	DHF-S325 066M	DHF-S400 100M	DHF-S400 150M	DHF-S400 200M
Capacitance (μF ±10%)	0.33	0.66	1.0	1.5	2.0
Sinusoidal Voltage (V rms)	700	700	600	525	525
Max Current (A rms)	550	550	750	800	800
Max Power (Kvar)	325	325	400	400	400
Frwquency Range(KHz) at.Full Power kvar	320-448	160-224	177-224	154-170	115-127
Dimensions L×W×H (mm)	70 L×57 W×41 H				
Stray Inductance (nH)	< 5				

■Drawing



Patented R .O Korea 대한민국 특허 출원 .등록 제품

DAEDONG CAPACITOR CO., LTD.

Conduction-cooled Power Capacitors

DHE-S Series

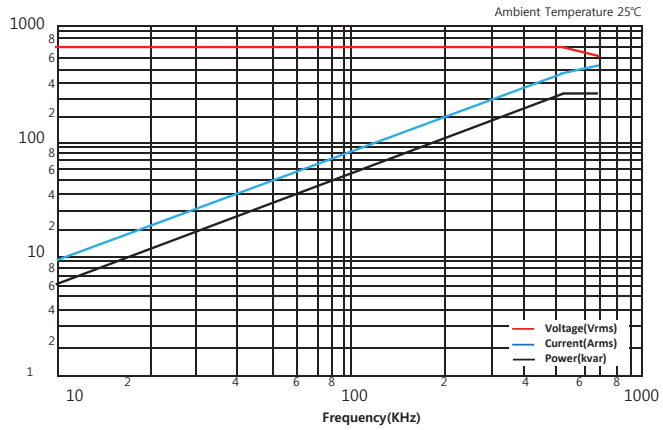
Polypropylene Film Capacitor

■ Typical Maximum Rating Curves for DHE-S Series

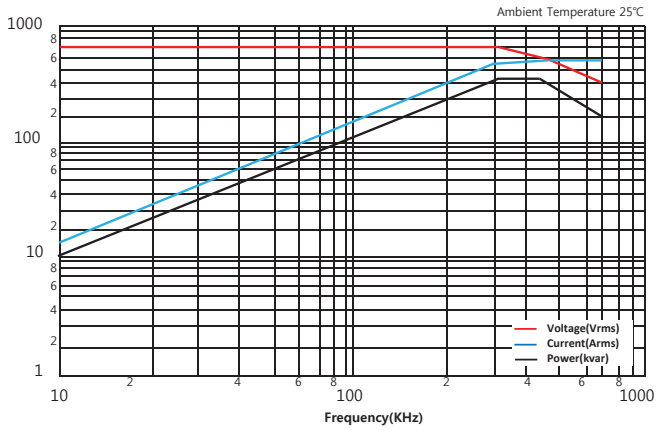
V rms , A rms , Q Kvar

Frequency Derating

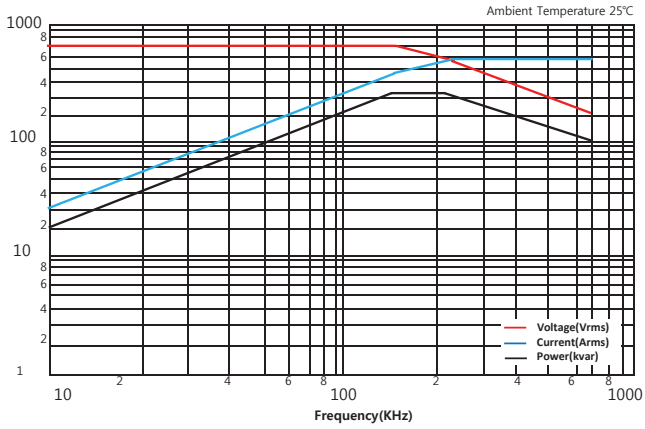
0.2㎌ 700Vrms, 550Arms, 325kvar



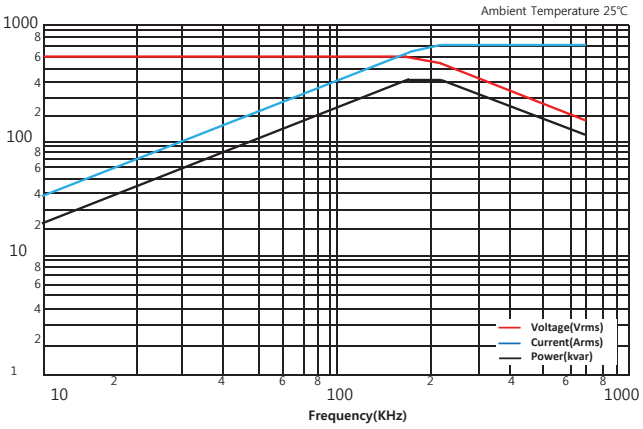
0.33㎌ 700Vrms, 550Arms, 325kvar



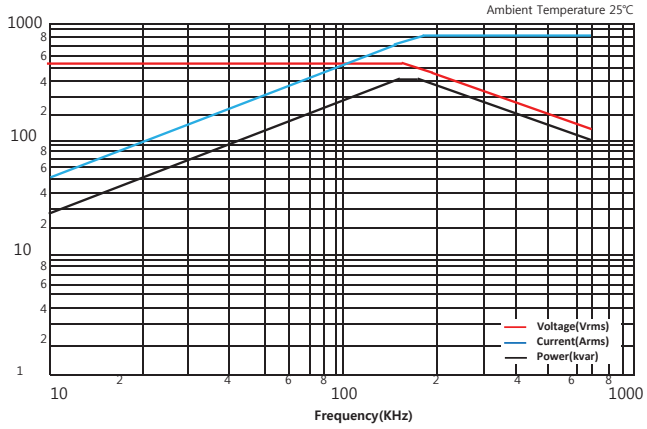
0.66㎌ 700Vrms, 550Arms, 325kvar



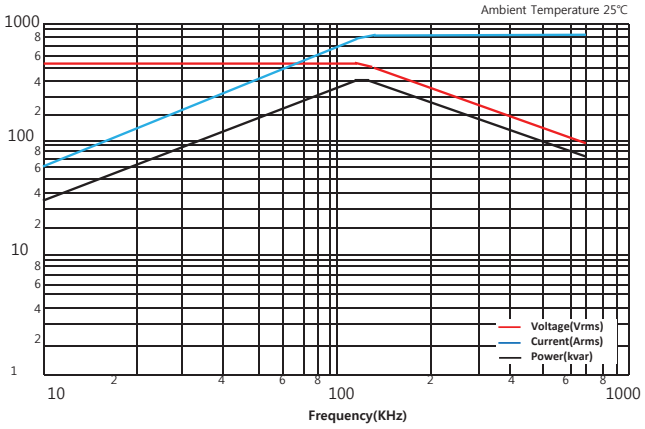
1.0㎌ 600Vrms, 750Arms, 400kvar



1.5㎌ 525Vrms, 800Arms, 400kvar



2.0㎌ 525Vrms, 800Arms, 400kvar



Patented R .O Korea 대한민국 특허 출원 .등록 제품

Conduction-cooled Power Capacitors

DHF-S Series

Polypropylene Film Capacitor

Part Number DHF-S325P Series

■ Characteristics

- This model cooled flowing through rectangular-shapped outside copper electride connected, and conduction -cooled by bus bar.
- Polypropylene dielectric, Self-healing
- Maximum operating temperature 90℃(Surface to hotspot)
- Cooling method : conduction -cooled by bus bar
- Capacitance Tolerance : ±10%
- Dissipation Factor : 0.1% Maximum
- Stray inductance : Less than 5nH

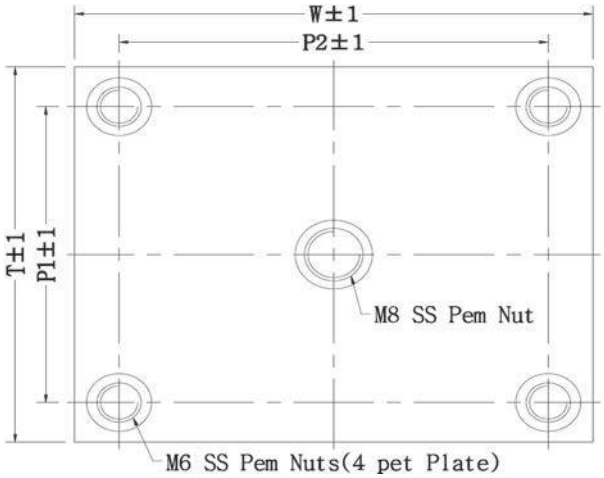
■ Applications

Induction Heating, Electric Cars, Medical Imaging, EV Wireless Chargers, Magnetisers & Traction Equipmen, LC Resonant Circuits

■ Specification

Vmax Voltage Vrms	Norminal capacitance (μF) at 1KHz	Max current Irms	Max power Kvars	Frequency Range KHz	ESR mΩ	Dimensions mm W	T	H	P1	P2	Terminal Style	Part No
700	0.2	550	325	527-740	1.3	70	57	34	45	58	5P	DHF-S325020P
700	0.33	550	325	320-448	1.0	70	57	34	45	58	5P	DHF-S325033P
700	0.66	750	325	160-124	0.8	70	57	34	45	58	5P	DHF-S325066P
600	1.0	800	400	177-224	0.5	70	57	34	45	58	5P	DHF-S400100P
525	1.5	800	400	154-170	0.4	70	57	34	45	58	5P	DHF-S400150P
525	2.0	800	400	115-127	0.3	70	57	34	45	58	5P	DHF-S400200P

■ Capacitor Drawing and Terminal Style



- Max.torque terminal(pem Nuts) : 15Nm

* Upon your request, it is possible to produce other modified products beside above rating & dimensions.

Conduction-cooled Power Capacitors

DHF-S Series

Polypropylene Film Capacitor

Part Number DHF-S400P Series

■ Characteristics

- This model cooled flowing through rectangular-shapped outside copper electride connected, and conduction -cooled by bus bar.
- Polypropylene dielectric, Self-healing
- Stray inductance < 10nH
- Maximum frequency 1000KHz
- Maximum operating core temperature 85℃
- Capacitance tolerance ±10%

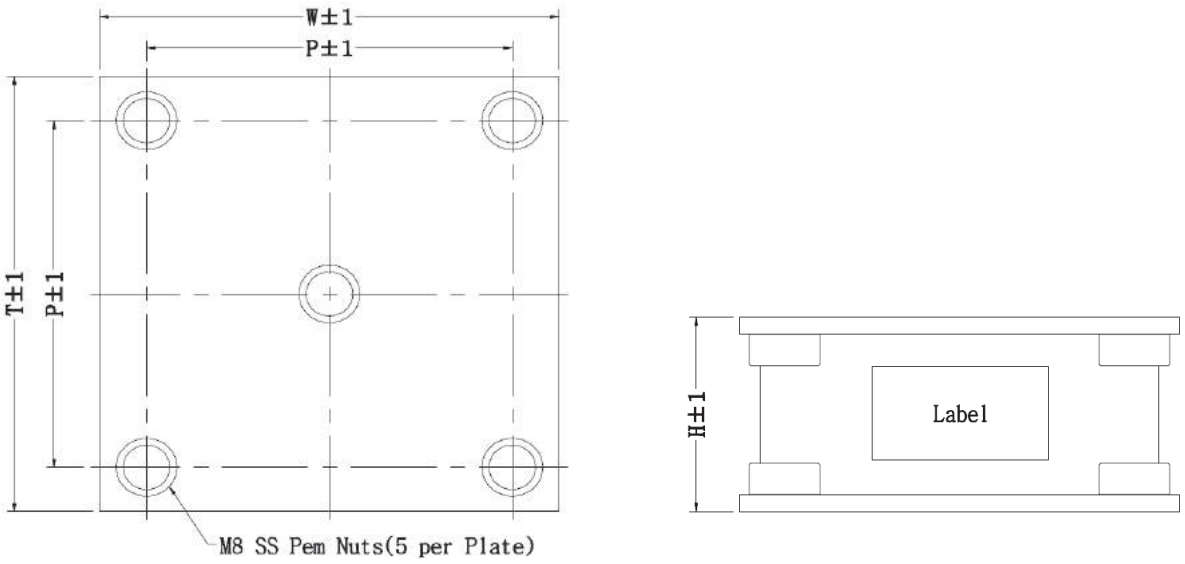
■ Applications

Induction Heating, Electric Cars, Medical Imaging, EV Wireless Chargers, Magnetisers & Traction Equipmen, LC Resonant Circuits

■ Specification

Rated Voltage Vrms	Peak Voltage Vpeak	Norminal capacitance (μF) at 1KHz	Max current Irms	Max power Kvars	Frequency Range KHz	ESR mΩ	Dimensions mm				Terminal Style
							H	W	T	P	
1000	1410	0.33	600	400	199-433	1.0	34	78	78	62	5P
1000	1410	0.66	600	400	95-216	0.8	34	78	78	62	5P
900	1270	1.20	850	400	66-239	0.4	34	78	78	62	5P
900	1270	1.32	850	400	58-215	0.3	34	78	78	62	5P
700	990	2.60	950	400	51-138	0.2	34	78	78	62	5P
500	700	5.00	1000	400	50-80	0.2	34	78	78	62	5P

■ Capacitor Drawing and Terminal Style



* Max.torque terminal(pem Nuts) : 20Nm

* Upon your request, it is possible to produce other modified products beside above rating & dimensions.

DAEDONG CAPACITOR CO., LTD.

Conduction-cooled Power Capacitors

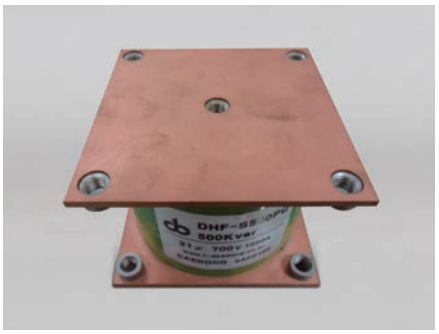
DHF-S Series

Polypropylene Film Capacitor

Part Number DHF-S500P

■ Characteristics

- This model cooled flowing through rectangular-shapped outside copper electride connected, and conduction -cooled by bus bar.
- Polypropylene dielectric, Self-healing
- Maximum operating temperature 80℃(Surface to hotspot)
- Cooling method : conduction -cooled by bus bar
- Capacitance Tolerance : ±10%
- Dissipation Factor : 0.1% Maximum
- Stray inductance : Less than 10nH



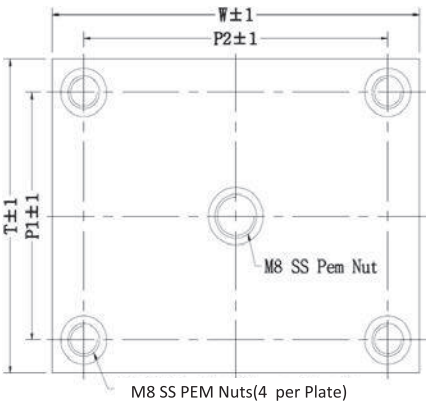
■ Applications

Induction Heating, Electric Cars, Medical Imaging, EV Wireless Chargers, Magnetisers & Traction Equipmen, Wireless Power Transfer (WPT) for Electric Transit Applications, LC Resonant Circuits

■ Specification

Vmax Voltage Vrms	Norminal capacitance (μF) at 1KHz	Max current Irms	Max power Kvars	Frequency Range KHz	ESR mΩ	Dimensions mm W	T	H	P1	P2	Termi nal Style	Part No
1100	1.2	600	500	55~96	1.5	78	78	47	62	62	5P	DHF-S500P0120A
1100	1.4	600	500	46~83	1.2	78	78	47	62	62	5P	DHF-S500P0140A
1000	10.0	1000	500	8	1.0	100	100	71.5	84	84	5P	DHF-S500PQ1000A
900	4.0	700	500	25~39	1.1	100	100	47	84	84	5P	DHF-S500P0400A
750	3.0	800	500	47~68	1.1	85	85	47	69	69	5P	DHF-S500P0300A
750	3.3	800	500	43~62	1.0	85	85	47	69	69	5P	DHF-S500P0330A
700	2.42	700	500	33~62	1.2	85	85	47	69	69	5P	DHF-S500P0242A
700	3.26	700	500	25~50	1.0	85	85	47	69	69	5P	DHF-S500P0326A
700	5.60	1000	500	29~57	0.9	85	85	47	69	69	5P	DHF-S500P0560A
700	6.30	1000	500	26~51	0.8	85	85	47	69	69	5P	DHF-S500P0630A
700	8.50	1000	500	19~38	0.7	85	85	47	69	69	5P	DHF-S500P0850A
700	10.00	1000	500	16~32	0.6	100	100	54	84	84	5P	DHF-S500P1000A
700	21.00	1000	500	4~30	0.4	100	100	71.5	84	84	5P	DHF-S500PQ2100B
550	27.00	1000	500	10~12	0.3	100	100	54	84	84	5P	DHF-S500P2700A
500	21.00	1000	500	15	0.4	100	100	47	84	84	5P	DHF-S500P2100A
500	33.00	1000	500	10	0.3	100	100	54	84	84	5P	DHF-S500P3300A
500	37.00	1000	500	9	0.2	100	100	54	84	84	5P	DHF-S500P3700A
500	37.00	1000	500	9	0.2	100	100	71.5	84	84	5P	DHF-S500PQ3700B

■ Capacitor Drawing and Terminal Style



- Max.torque terminal(pem Nuts) : 20Nm

* Upon your request, it is possible to produce other modified products beside above rating & dimensions.

Conduction-cooled Power Capacitors

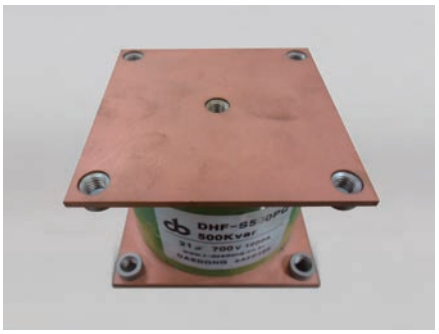
DHF-S Series

Polypropylene Film Capacitor

Part Number DHF-S700P

■ Characteristics

- This model cooled flowing through rectangular-shapped outside copper electride connected, and conduction -cooled by bus bar.
- Polypropylene dielectric, Self-healing
- Maximum operating temperature 85℃(Core to hotspot)
- Cooling method : conduction -cooled by bus bar
- Operating frequency 30KHz
- Capacitance Tolerance : ±10%
- Dissipation Factor : 0.1% Maximum
- Stray inductance : Less than 10nH



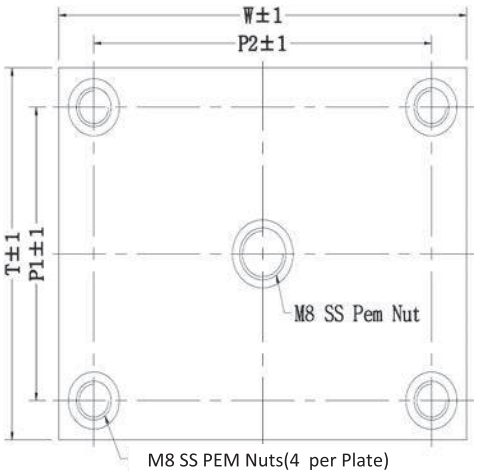
■ Applications

Induction Heating, Electric Cars, Medical Imaging, EV Wireless Chargers, Magnetisers & Traction Equipmen, Wireless Power Transfer (WPT) for Electric Transit Applications, LC Resonant Circuits

■ Specification

Vmax Voltage Vrms	Norminal capacitance (μF) at 1KHz	Max current Irms	Max power Kvars	Frequency Range KHz	ESR mΩ	Dimensions mm					Termi nal Style	Part No
						W	T	H	P1	P2		
1000	5	800	700	22-29	0.7	130	130	71.5	109	109	5P	DHF-S700P0500A
900	9.0	900	700	15.3-20	0.6	130	130	71.5	109	109	5P	DHF-S700P0900A
850	12.0	1000	700	19-19	0.6	130	130	71.5	109	109	5P	DHF-S700P1200A
850	14.0	1000	700	11-16.2	0.5	130	130	71.5	109	109	5P	DHF-S700P1400A
800	19.0	1000	700	9.2-12	0.4	130	130	71.5	109	109	5P	DHF-S700P1900A
700	25.0	1050	700	9-11	0.4	130	130	71.5	109	109	5P	DHF-S700P2500A
700	27	1100	700	8.4-10.2	0.3	130	130	71.5	109	109	5P	DHF-S700P2700A
600	33	1150	700	6.9-9.1	0.2	130	130	71.5	109	109	5P	DHF-S700P3300A
600	46	1200	700	6.7-7.1	0.2	130	130	71.5	109	109	5P	DHF-S700P4600A
600	63	1200	700	4.5-5.7	0.1	130	130	71.5	109	109	5P	DHF-S700P6300A
500	80	1400	700	5.6-5.6	0.1	130	130	71.5	109	109	5P	DHF-S700P8000A
500	85	1400	700	5.2-5.2	0.1	130	130	71.5	109	109	5P	DHF-S700P8500A

■ Capacitor Drawing and Terminal Style



- Max.torque terminal(pem Nuts) : 20Nm

* Upon your request, it is possible to produce other modified products beside above rating & dimensions.

DAEDONG CAPACITOR CO., LTD.

Capacitors for Medical Instruments

DMF-M Series

Metallized Polypropylene Film Capacitors

■ Characteristics

DMF-M Series capacitors designed with high heat -resistance metallized polypropylene film. This type is high stability and high reliability . And applicable medical instruments.

■ Specifications

Items	Characteristics
Capacitance	50 to 200 ㎌
Capacitance tolerance	J(±5%) , U(−5 ~10%), K(±10%)
Operating temperature range	−25 ~ +85℃ at 70% U_R
	−25 ~ +70℃ at 80% U_R
	−25 ~ +60℃ at 100% U_R
Storage Temperature range	−25 ~ +85℃
Rated Voltage (U_R)	900 to 5000VDC
Voltage test between terminals (U_{TT})	U_R ×1.5 VDC , 60sec
Voltage test terminals to case U_{TC}	U_R ×2+1000 VAC, 60Hz, 60sec
Insulation Resistance(Terminal to Case)	Min 3000㏁ at. 500VDC 1 Minute
Dissipation Factor(Tanδ)	0.5% Max at.1KHz .20℃
Terminals(permitted Torque)	M6 × 10 (4 ±0.5Nm)
Stud Bolt(permitted Torque)	M12 × 16/18 (7 ±1Nm)
Life Time Test	U_R ×1.25 VDC ,85℃,1000Hr
Dielectric film	High heat−resiatance Metallized Polypropylene Film
Cap material	Plastic
Impregnants	Epoxy Resin , UL 94 V−O class
Case material	Aluminium rectangular
Humidity	40±20℃,90~95% 30days / year
Life Expenctancy	25×10^6 Charge and Discharge Cycles
Current Endurance	500A, 30~90㎲ , 100,000 Cycles

Reference standard: IEC 61071

■ Standard Ratings and case size

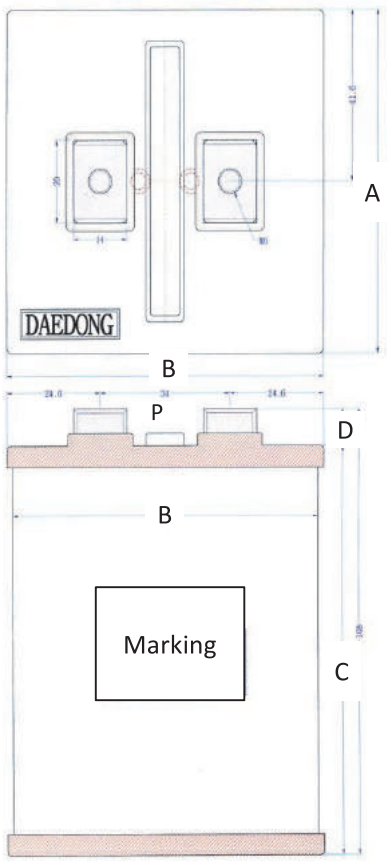
• Rated Voltage(U_R) : 1250VDC

Capacitance (㎌)	Model No.	Size (mm)			
		A	B	C	D/P
50	DMF−M125506K	83	83	75	9/34
60	DMF−M125606K	83	83	85	9/34
100	DMF−M125107Kb	73	73	129	9/34
100	DMF−M125107Ka	83	83	99	9/34
150	DMF−M125157K	83	83	170	9/34
200	DMF−M125207K	83	83	198	9/34

• Rated Voltage(U_R) : 1350VDC

Capacitance (㎌)	Model No.	Size (mm)			
		A	B	C	D
50	DMF−M135506K	83	83	75	9/34
60	DMF−M135606K	83	83	85	9/34
75	DMF−M135756K	83	83	100	9/34
100	DMF−M135107K	83	83	124	9/34
150	DMF−M135157K	83	83	165	9/34
200	DMF−M135207K	83	83	210	9/34

■ Rectangular-shaped aluminium case



* Capacitor dimensions / specifications subject to change, so please check before ordering.

DAEDONG CAPACITOR CO., LTD.

Capacitors for Medical Instruments

DMF-M Series

Metallized Polypropylene Film Capacitors

• Rated Voltage(U_R) : 2000VDC

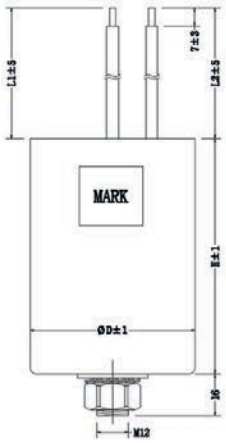
Capacitance (μF)	Model No.	Size (mm)			
		A	B	C	D/P
32	DMF-M200326K	83	83	100	9/34
70	DMF-M200207K	83	83	200	9/34
100	DMF-M200107K	110	105	180	7/34
110	DMF-M200107K	83	83	240	9/34

• Rated Voltage(U_R) : 2400VDC/2500VDC

Capacitance (μF)	Model No.	Size (mm)			
		A	B	C	D/P
55	DMF-M240556K	83	83	210	9/34
110	DMF-M240117K	104	84	340	9/34
500	DMF-M250507K	290	100	360	70/150

• Rated Voltage(U_R) : 3000VDC

Capacitance (μF)	Model No.	Size (mm)			
		A	B	C	D/P
60	DMF-M300606K	104	84	210	9/34
200	DMF-M300207K	160	145	265	6/90

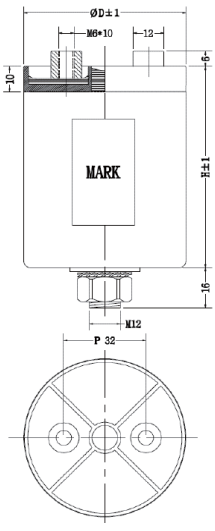


■ Standard Ratings and case size(Round-shapped)

*Round-shaped aluminium case

• Rated Voltage(U_R) :1200VDC~1400VDC, DAL-D Series

Capacitance (μF)	Model No.	Size (mm)			
		ΦD	H		D/P
100	DAL-D120107K	63	145	M12	6/32
150	DAL-D120157K	86	145	M12	6/32
100	DAL-D140107K	63	135	Wire	Wire



• Rated Voltage(U_R) : 1500VDC, DAL-D Series

Capacitance (μF)	Model No.	Size (mm)			
		ΦD	H		D/P
100	DAL-D150107K	86	135	M12	6/32

* Capacitor dimensions / Specifications subject to change, so please check before ordering.

Custom Design Capacitors

Custom Design Capacitors(Special)

Metallized Polypropylene Film Capacitor

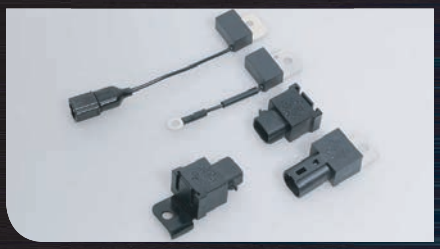
Custom Design Capacitors

DAEDONG CAPACITOR draws on years of cumulative engineering expertise to provide custom design and manufacturing services to meet your unique application needs. We stand apart in our ability to accurately assess engineering challenges and quickly devise effective, customized film capacitors.
Our Custom Applications Team works closely with you in a consultative manner to define and develop exactly the right capacitor solution.

- ▶ 무선전력전송용 커패시터 (WPT(Wireless Power Transmission) Capacitor)
- ▶ 전도냉각용 커패시터(Conduction Cooled Power Capacitor)
- ▶ 스너버용 커패시터(Snubber Capacitor)
- ▶ 의료기용 커패시터(Capacitors for Medical Instruments)
- ▶ DC링크용 커패시터(DC-Link Capacitors)
- ▶ 펄스파워용 커패시터(Pulse Power Capacitors)
- ▶ 그린카,전기자동차용 커패시터 (Capacitors for Green car & Electrical Vehicle)
- ▶ 운전용(기동용) 커패시터(Running(Starting) Capacitor)
- ▶ 등용 커패시터(Lighting Capacitor)
- ▶ 용접기용(Welding equipment Capacitor)

MEMO






Snubber Capacitors

Conduction Cooled Power Capacitors

DC Link Capacitors

Capacitors for Medical Instruments

Capacitors for Electrical Vehicles

Capacitors for ESS
(Energy Storage System)



DAEDONG CAPACITOR CO., LTD.

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