

TYPE : DPF

類別：DPF

Metallized Polypropylene Film Capacitor

金屬化聚丙烯薄膜電容器

介紹 DESCRIPTION

DPF series Flat Oval, axial film capacitors use polypropylene film and dual metallized electrodes for both self-healing properties and high peak current carrying capability (dV/dt).

This series features low ESR characteristics, excellent high frequency and high voltage capabilities.

DPF 系列扁平橢圓形軸向薄膜電容器採用聚丙烯薄膜，且具有自愈特性和高峰值載流能力 (dV/dt)。該系列具有低 **ESR** 特性、出色的高頻和高壓能力。

用途 APPLICATION

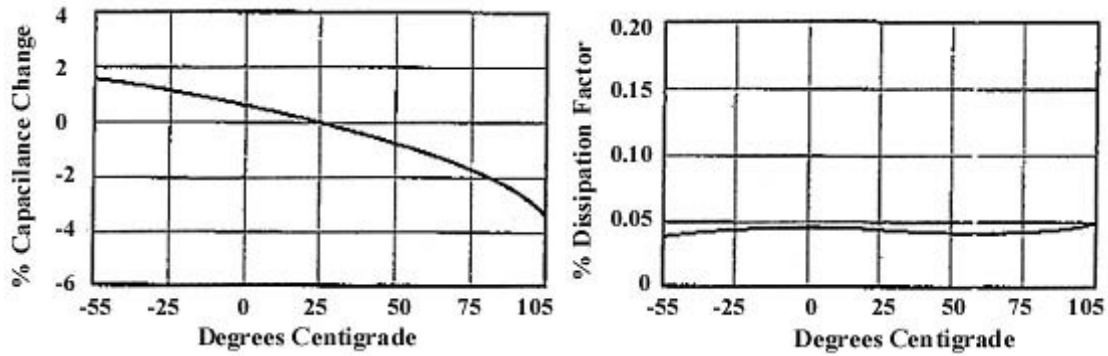
- Suitable for high current, high frequency, and high pulse applications.
- IGBT Snubber
- High dV/dt
- 適用於大電流、高頻和高脈衝應用。
- **IGBT** 緩衝器
- 高 dV/dt



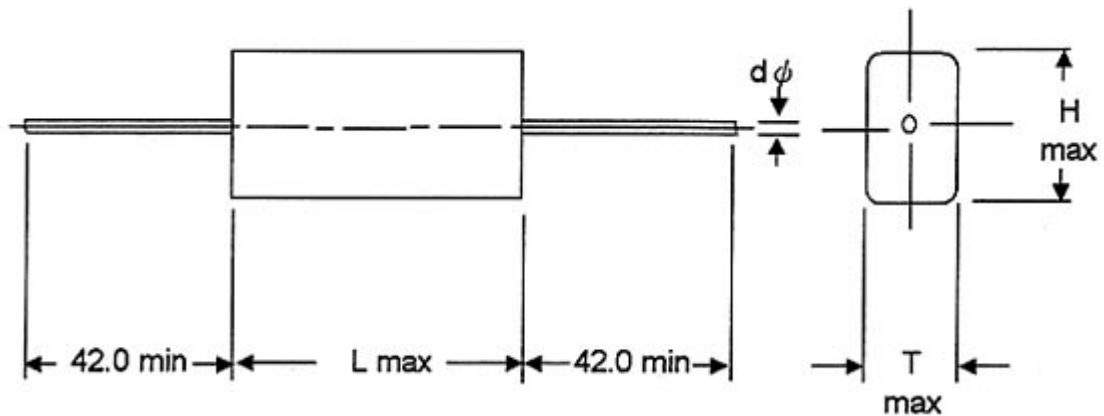
SPECIFICATIONS

Voltage Range 電壓範圍	600~3000 VDC
Capacitance Range 電容範圍	0.01~4.7uF
Capacitance Tolerance 電容誤差	±10%
Operating Temperature Range 工作溫度範圍	-55°C to 105°C
Dielectric strength 介電強度	160 % of the rated voltage for 60 sec 160%的額定電壓持續 60 秒
Dissipation Factor (DF) 散逸因素	<0.1% max at 1 KHZ 25°C
Insulation Resistance(IR) 絕緣電阻	>100,000MΩ x uF at 100vdc measured after 2 minutes

Typical Characteristics



DPF



Metallized Polypropylene Film Capacitors(Flat Oval)

600VDC(275VAC) TYPE : DPF (UNIT : mm)

CAP. (μF)	L (mm)	H (mm)	T (mm)	d (mm)	Typical ESR($\text{m}\Omega$)	Typical ESL(nH)	dv/dt V/us	I peak A	I _{rms} (A) 100KHz 70 °C
0.10	34.0	11.9	5.7	0.8	28	17	196	20	2.8
0.15	34.0	13.0	6.8	0.8	13	18	196	29	4.4
0.22	34.0	14.3	8.1	0.8	12	19	196	43	4.9
0.33	34.0	16.1	9.8	0.8	9	19	196	65	6.1
0.47	34.0	18.0	11.7	0.8	7	20	196	92	7.6
0.68	34.0	20.4	14.2	1.0	6	21	196	134	8.9
1.00	34.0	23.5	17.3	1.0	6	23	196	196	9.9
1.50	34.0	27.5	21.3	1.2	5	24	196	295	12.1
2.00	46.0	27.6	18.2	1.2	5	28	128	255	13.1
3.30	54.0	31.8	22.5	1.2	4	34	105	346	17.3
4.70	54.0	33.3	28.6	1.2	4	36	105	492	18.7

TAI-YAO ELECTRONICS CO., LTD. FILM CAPACITORS

850VDC(450VAC) TYPE : DPF (UNIT : mm)

CAP. (uF)	L (mm)	H (mm)	T (mm)	d (mm)	Typical ESR(mΩ)	Typical ESL(nH)	dv/dt V/us	I peak A	Irms(A) 100KHz 70°C
0.15	34.0	15.9	9.6	0.8	8	19	713	107	6.4
0.22	34.0	17.9	11.6	0.8	8	20	713	157	7.0
0.33	34.0	20.6	14.3	1.0	7	21	713	235	8.3
0.47	34.0	23.4	17.1	1.0	5	22	713	335	10.8
0.68	34.0	27.0	20.7	1.2	4	24	713	485	13.3
1.00	46.0	26.7	17.2	1.2	5	28	400	400	12.7
1.50	46.0	30.9	21.5	1.2	4	30	400	600	15.8
2.00	46.0	34.6	25.1	1.2	3	31	400	800	19.8
2.20	46.0	35.9	26.5	1.2	3	32	400	880	20.4
2.50	46.0	37.8	28.4	1.2	3	33	400	1000	21.2

1000VDC(500VAC) TYPE : DPF (UNIT : mm)

CAP. (uF)	L (mm)	H (mm)	T (mm)	d (mm)	Typical ESR(mΩ)	Typical ESL(nH)	dv/dt V/us	I peak A	Irms(A) 100KHz 70°C
0.15	34.0	17.5	11.2	0.8	7	20	856	128	7.4
0.22	34.0	19.9	13.6	1.0	7	21	856	188	8.1
0.33	34.0	23.0	16.7	1.0	6	22	856	283	9.7
0.47	34.0	26.3	20.1	1.2	5	24	856	402	11.7
0.68	34.0	30.5	24.2	1.2	5	26	856	582	13.0
1.00	46.0	29.8	20.4	1.2	5	24	480	480	13.8
1.50	46.0	34.8	25.4	1.2	4	31	480	720	17.3
2.00	46.0	39.1	29.7	1.2	3	33	480	960	21.7

1200VDC(500VAC) TYPE : DPF (UNIT : mm)

CAP. (uF)	L (mm)	H (mm)	T (mm)	d (mm)	Typical ESR(mΩ)	Typical ESL(nH)	dv/dt V/us	I peak A	Irms(A) 100KHz 70°C
0.10	34.0	18.0	11.7	0.8	9	20	1142	114	6.7
0.15	34.0	20.7	14.4	1.0	7	21	1142	171	8.3
0.22	34.0	23.8	17.5	1.0	7	23	1142	251	9.2
0.33	46.0	24.0	14.6	1.0	7	21	640	211	10.0
0.47	46.0	27.1	17.7	1.2	7	28	640	301	10.9
0.68	46.0	31.1	21.7	1.2	6	30	640	435	13.0
1.00	46.0	36.1	26.7	1.2	5	32	640	640	15.9
1.50	54.0	40.2	27.6	1.2	4	36	502	754	19.7

TAI-YAO ELECTRONICS CO., LTD. FILM CAPACITORS

1600VDC(500VAC) TYPE : DPF (UNIT : mm)

CAP. (μ F)	L (mm)	H (mm)	T (mm)	d (mm)	Typical ESR($m\Omega$)	Typical ESL(nH)	dv/dt V/us	I peak A	Irms(A) 100KHz 70°C
0.10	34.0	20.6	14.3	1.0	7	21	1427	143	8.3
0.15	34.0	23.9	17.7	1.0	5	23	1427	214	11.0
0.22	34.0	27.8	21.5	1.2	7	24	1427	314	10.3
0.33	46.0	27.6	18.2	1.2	7	23	800	264	11.0
0.47	46.0	31.4	22.0	1.2	6	30	800	376	13.1
0.68	46.0	36.3	26.9	1.2	6	32	800	544	14.5
1.00	46.0	42.5	33.1	1.2	5	35	800	800	17.9
1.50	54.0	47.0	34.5	1.2	4	39	628	942	22.2

2000VDC(500VAC) TYPE : DPF (UNIT : mm)

CAP. (μ F)	L (mm)	H (mm)	T (mm)	d (mm)	Typical ESR($m\Omega$)	Typical ESL(nH)	dv/dt V/us	I peak A	Irms(A) 100KHz 70°C
0.022	34.0	14.2	7.9	0.8	35	18	1712	38	2.8
0.033	34.0	16.0	9.7	0.8	20	19	1712	57	4.1
0.047	34.0	17.8	11.6	0.8	12	20	1712	80	5.7
0.068	34.0	20.2	14.0	1.0	8	21	1712	116	7.7
0.100	34.0	23.3	17.0	1.0	7	22	1712	171	9.1
0.150	46.0	23.6	14.1	1.0	7	21	960	144	9.8
0.220	46.0	26.8	17.4	1.0	8	28	960	211	10.1
0.330	46.0	31.2	21.7	1.2	8	30	960	317	11.3
0.470	46.0	35.8	26.3	1.2	6	32	960	451	14.4
0.560	54.0	36.5	23.9	1.2	7	31	754	422	13.9
0.680	54.0	39.2	26.7	1.2	6	35	754	513	15.8
1.000	54.0	45.6	33.1	1.2	5	38	754	754	19.4

3000VDC(500VAC) TYPE : DPF (UNIT : mm)

CAP. (μ F)	L (mm)	H (mm)	T (mm)	d (mm)	Typical ESR($m\Omega$)	Typical ESL(nH)	dv/dt V/us	I peak A	Irms(A) 100KHz 70°C
0.010	34.0	14.1	7.8	0.8	60	18	2568	26	2.2
0.015	34.0	15.8	9.5	0.8	40	19	2568	39	2.9
0.022	34.0	17.8	11.5	0.8	25	20	2568	57	4.0
0.033	34.0	20.4	14.2	1.0	14	21	2568	85	5.8
0.047	46.0	20.7	11.3	1.0	14	20	1440	68	6.3
0.068	46.0	23.3	13.8	1.0	12	26	1440	98	7.4
0.100	46.0	26.5	17.1	1.2	10	28	1440	144	9.0
0.150	46.0	30.7	21.3	1.2	8	30	1440	216	11.2