

TYPE : DPC-L/N

類別：DPC-L/N

Metallized Polypropylene Film Capacitor

金屬化聚丙烯薄膜電容器

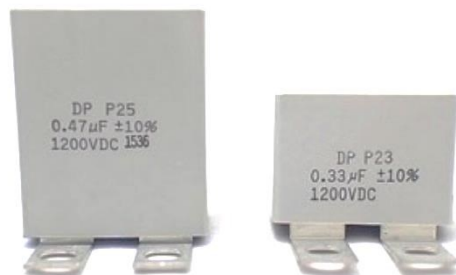
## 介紹 DESCRIPTION

DPC-L, DPC-N series are Radial box 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.  
**DPC-L、DPC-N** 系列是徑向盒式薄膜電容器，使用聚丙烯薄膜和雙金屬化電極，具有自愈特性和高峯值載流能力 (dV/dt)。該系列具有低 **ESR** 特性、出色的高頻和高壓能力。

## 用途 APPLICATION

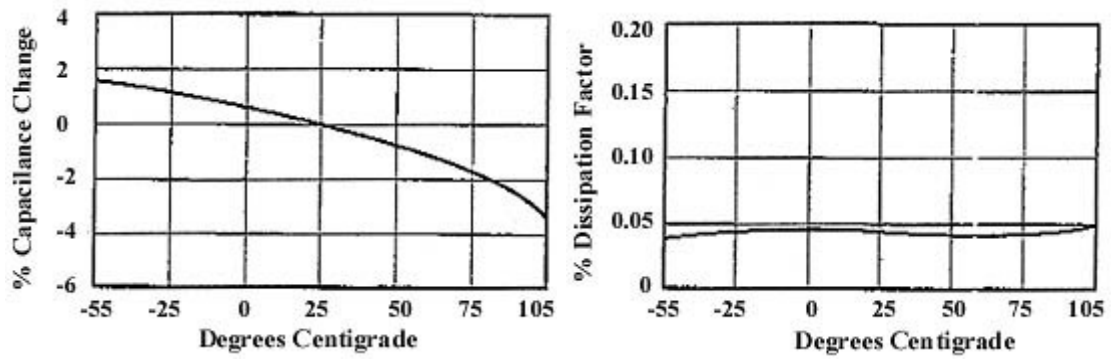
- Suitable for high current, high frequency, and high pulse applications.
- IGBT Snubber
- High dV/dt
- 適用於大電流、高頻和高脈衝應用。
- **IGBT 緩衝器**
- **高 dV/dt**



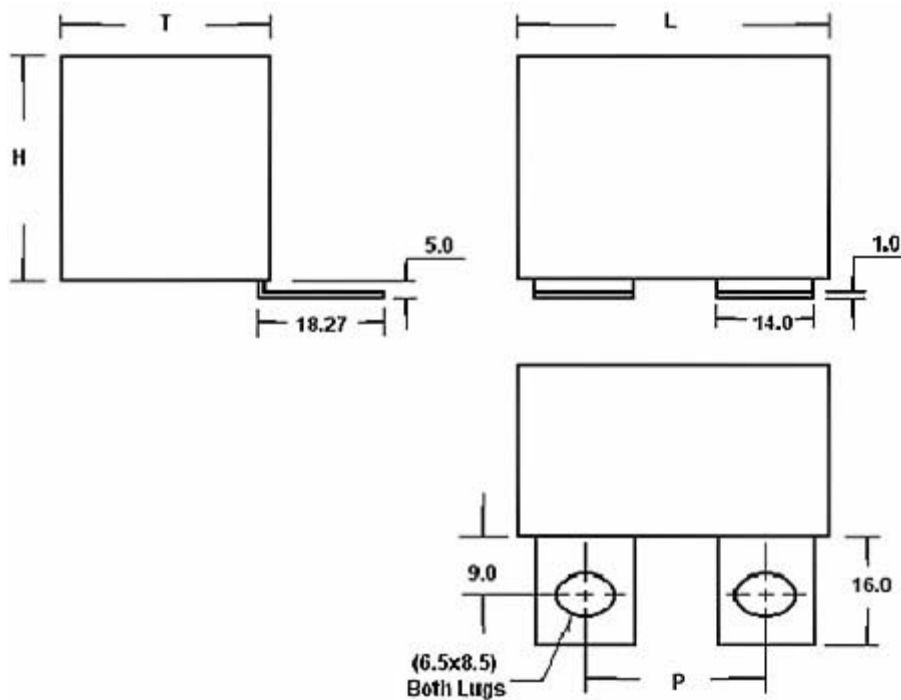
## SPECIFICATIONS

Voltage Range 電壓範圍	600~2000 VDC
Capacitance Range 電容範圍	0.15~6uF
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

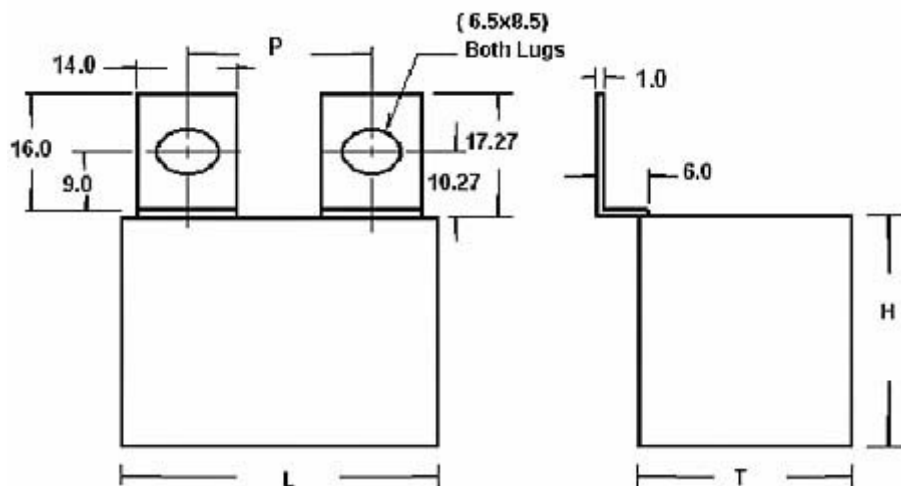
# Typical Characteristics



## DPC-L



## DPC-N



## Metalized Polypropylene Film Capacitors

TAI-YAO ELECTRONICS CO., LTD. FILM CAPACITORS

600VDC(275VAC) TYPE : DPC-L / N (UNIT : mm)

CAP (uF)	L ±1.0	H ±1.0	T ±1.0	P ±1.0	Typical ESR(mΩ)	dv/dt V/us	I peak A	Irms(A) 100KHz 70°C
0.33	45.0	33.0	22.0	23 ; 25	14.0	300	99	6.7
0.47	45.0	33.0	22.0	23 ; 25	12.0	250	118	8.1
0.56	45.0	33.0	22.0	23 ; 25	10.0	250	140	8.8
0.68	45.0	33.0	22.0	23 ; 25	9.0	200	136	9.4
1.0	45.0	33.0	22.0	23 ; 25	8.0	150	150	10.0
1.2	45.0	33.0	22.0	23 ; 25	8.0	150	180	10.4
1.5	45.0	33.0	22.0	23 ; 25	7.0	150	225	10.6
2.0	51.0	36.0	25.0	23 ; 25 ; 28	7.0	150	300	11.7
2.2	51.0	36.0	25.0	23 ; 25 ; 28	6.0	150	330	12.3
2.5	51.0	36.0	25.0	23 ; 25 ; 28	6.0	150	375	13.6
3.0	51.0	40.0	30.0	23 ; 25 ; 28	6.0	150	450	14.4
3.3	51.0	40.0	30.0	23 ; 25 ; 28	5.0	150	495	14.8
3.5	51.0	40.0	30.0	23 ; 25 ; 28	5.0	150	525	16.4
4.0	57.5	37.0	31.5	23 ; 25 ; 28	5.0	120	480	15.7
4.5	57.5	37.0	31.5	23 ; 25 ; 28	4.0	120	540	17.8
4.7	59.0	45.0	35.0	23 ; 25 ; 28	4.0	120	564	19.6

**850VDC(450VAC) TYPE : DPC-L/N (UNIT : mm)**

CAP (uF)	L ±1.0	H ±1.0	T ±1.0	P ±1.0	Typical ESR(mΩ)	dv/dt V/us	I peak A	Irms(A) 100KHz 70°C
0.15	45.0	33.0	23.0	23 ; 25	28.0	750	113	5.8
0.22	45.0	33.0	22.0	23 ; 25	19.0	650	143	6.4
0.33	45.0	33.0	22.0	23 ; 25	13.0	500	165	7.0
0.47	45.0	33.0	22.0	23 ; 25	9.0	450	211	9.3
0.56	45.0	33.0	22.0	23 ; 25	9.0	400	224	9.5
0.68	45.0	33.0	22.0	23 ; 25	9.0	300	204	9.7
1.0	45.0	33.0	22.0	23 ; 25	6.0	300	300	12.0
1.2	51.0	36.0	25.0	23 ; 25 ; 28	6.0	300	360	14.7
1.5	51.0	40.0	30.0	23 ; 25 ; 28	6.0	300	450	16.4
2.0	51.0	40.0	30.0	23 ; 25 ; 28	6.0	300	600	19.2
2.2	51.0	40.0	30.0	23 ; 25 ; 28	5.0	300	660	20.2
2.5	57.5	37.0	31.5	23 ; 25 ; 28	5.0	250	625	19.7
3.0	59.0	45.0	35.0	23 ; 25 ; 28	5.0	250	750	21.5
3.3	59.0	45.0	35.0	23 ; 25 ; 28	5.0	250	825	22.6
3.5	59.0	45.0	35.0	23 ; 25 ; 28	5.0	250	875	23.3
4.0	59.0	47.0	39.0	23 ; 25 ; 28	5.0	250	1000	24.5
4.5	59.0	47.0	39.0	23 ; 25 ; 28	4.0	250	1125	26.0
5.0	59.0	55.0	45.0	23 ; 25 ; 28	4.0	250	1250	27.4
5.5	59.0	55.0	45.0	23 ; 25 ; 28	4.0	250	1375	28.7
6.0	59.0	55.0	45.0	23 ; 25 ; 28	4.0	250	1500	30.0

TAI-YAO ELECTRONICS CO., LTD. FILM CAPACITORS

**1000VDC(500VAC) TYPE : DPC-L / N (UNIT : mm)**

CAP ( $\mu$ F)	L $\pm 1.0$	H $\pm 1.0$	T $\pm 1.0$	P $\pm 1.0$	Typical ESR(m $\Omega$ )	dv/dt V/ $\mu$ s	I peak A	Irms(A) 100KHz 70 $^{\circ}$ C
0.15	45.0	33.0	22.0	23 ; 25	28.0	750	113	5.8
0.22	45.0	33.0	22.0	23 ; 25	19.0	650	143	6.4
0.33	45.0	33.0	22.0	23 ; 25	13.0	500	165	7.0
0.47	45.0	33.0	22.0	23 ; 25	9.0	450	211	9.3
0.56	45.0	33.0	22.0	23 ; 25	9.0	400	224	9.5
0.68	45.0	33.0	22.0	23 ; 25	7.0	400	272	10.6
1.0	51.0	36.0	25.0	23 ; 25; 28	5.0	400	400	13.8
1.2	51.0	40.0	30.0	23 ; 25; 28	5.0	400	480	15.1
1.5	51.0	40.0	30.0	23 ; 25; 28	4.0	400	600	16.9
2.0	57.5	37.0	31.5	23 ; 25; 28	4.0	310	617	19.6
2.2	59.0	45.0	35.0	23 ; 25; 28	4.0	310	682	20.5
2.5	59.0	45.0	35.0	23 ; 25; 28	4.0	310	775	21.9
3.0	59.0	47.0	39.0	23 ; 25; 28	4.0	310	930	24.0
3.3	59.0	47.0	39.0	23 ; 25; 28	4.0	310	1023	24.0
3.5	59.0	47.0	39.0	23 ; 25; 28	4.0	310	1085	25.9
4.0	59.0	55.0	45.0	23 ; 25; 28	4.0	310	1240	27.7
4.5	59.0	55.0	45.0	23 ; 25; 28	4.0	310	1395	29.4

**1200VDC(550VAC) TYPE : DPC-L / N (UNIT : mm)**

CAP ( $\mu$ F)	L $\pm 1.0$	H $\pm 1.0$	T $\pm 1.0$	P $\pm 1.0$	Typical ESR(m $\Omega$ )	dv/dt V/ $\mu$ s	I peak A	Irms(A) 100KHz 70 $^{\circ}$ C
0.15	45.0	33.0	22.0	23 ; 25	28.0	750	113	5.8
0.22	45.0	33.0	22.0	23 ; 25	19.0	650	143	6.4
0.33	45.0	33.0	22.0	23 ; 25	13.0	500	165	7.8
0.47	51.0	36.0	25.0	23 ; 25; 28	10.0	500	235	9.8
0.56	51.0	36.0	25.0	23 ; 25; 28	9.0	500	280	10.9
0.68	51.0	40.0	30.0	23 ; 25; 28	7.0	500	340	12.7
1.0	51.0	40.0	30.0	23 ; 25; 28	5.0	500	500	15.1
1.2	57.5	37.0	31.5	23 ; 25; 28	5.0	400	480	15.4
1.5	59.0	45.0	35.0	23 ; 25; 28	4.0	400	600	19.6
2.0	59.0	45.0	35.0	23 ; 25; 28	4.0	400	800	19.6
2.2	59.0	47.0	39.0	23 ; 25; 28	4.0	400	880	19.7
2.5	59.0	55.0	45.0	23 ; 25; 28	4.0	400	1000	20.0
3.0	59.0	55.0	45.0	23 ; 25; 28	5.0	400	1200	20.0

**1600VDC(630VAC) TYPE : DPC-L / N (UNIT : mm)**

CAP (uF)	L ±1.0	H ±1.0	T ±1.0	P ±1.0	Typical ESR(mΩ)	dv/dt V/us	I peak A	Irms(A) 100KHz 70°C
0.15	45.0	33.0	22.0	23 ; 25	28.0	650	113	5.8
0.22	45.0	33.0	22.0	23 ; 25	19.0	650	143	6.4
0.33	45.0	33.0	22.0	23 ; 25	12.0	650	215	8.1
0.47	51.0	36.0	25.0	23 ; 25 ; 28	10.0	650	306	9.8
0.56	51.0	40.0	30.0	23 ; 25 ; 28	9.0	650	364	11.3
0.68	51.0	40.0	30.0	23 ; 25 ; 28	7.0	650	442	12.7
1.0	59.0	45.0	35.0	23 ; 25 ; 28	6.0	500	500	15.9
1.2	59.0	45.0	35.0	23 ; 25 ; 28	5.0	500	600	16.6
1.5	59.0	55.0	45.0	23 ; 25 ; 28	5.0	400	600	20.0
2.0	59.0	55.0	45.0	23 ; 25 ; 28	5.0	400	800	20.0

**2000VDC(630VAC) TYPE : DPC-L / N (UNIT : mm)**

CAP (uF)	L ±1.0	H ±1.0	T ±1.0	P ±1.0	Typical ESR(mΩ)	dv/dt V/us	I peak A	Irms(A) 100KHz 70°C
0.15	45.0	33.0	22.0	23 ; 25	26.0	800	120	6.0
0.22	45.0	33.0	22.0	23 ; 25	19.0	800	176	6.4
0.33	51.0	36.0	25.0	23 ; 25	13.0	800	264	8.2
0.47	51.0	40.0	30.0	23 ; 25 ; 28	10.0	800	376	10.7
0.56	57.5	37.0	31.5	23 ; 25 ; 28	9.0	600	336	12.4
0.68	59.0	45.0	35.0	23 ; 25 ; 28	8.0	600	408	13.8
1.0	59.0	47.0	39.0	23 ; 25 ; 28	6.0	600	600	16.6
1.2	59.0	55.0	45.0	23 ; 25 ; 28	5.0	600	720	20.0
1.5	59.0	55.0	45.0	23 ; 25 ; 28	5.0	600	900	20.0