

主要生產項目 *Mainly products:*

- Metallized polypropylene film capacitor → 金屬化聚丙烯膜電容器
- Metallized polyester film capacitor → 金屬化聚乙酯膜電容器
- Metallized film and aluminum foil complex capacitor → 金屬化膜鋁箔電容器
- Polypropylene or polyester film and aluminum foil complex capacitor
- Aluminum electrolytic motor starting capacitor → 馬達起動電容器
- Aluminum electrolytic capacitor → 電解電容器

電容器適用範圍 *Application:*

- For electric motor: air-conditioner, refrigerator, dehumidifier, dishwasher, washing machine, motor pump, fan motor, paper shredder and electrical power tool. (適用於各式家電如冷氣機、電冰箱、除濕機、洗衣機、洗碗機、果汁機、抽水機、馬達泵浦、風扇馬達、送風馬達、裁切機和電動工具機。)
- For lighting device: fluorescent lamp, mercury lamp, sodium lamp, ceramic metal halide lamp, metal halide lamp, solar simulator and LED.
(適用於螢光燈、日光燈、水銀燈、低壓鈉燈、高壓鈉燈、複金屬燈、陶瓷複金屬燈、太陽光模擬機。)
- For power electronics: 3 phase power factor correction, power supply, inverter, AC filtering, damping, coupling, commutating, switching, DC-link and welding machine. (適用於電力電子領域中的三相功率因數補償、耦合、整流、電源供應器、逆變器、電焊機、交流電源濾波、支撐電容等。)
- For electronic equipment: audio, EMI, by pass, decoupling, filtering and snubber. (適用於音響設備、分音器、電源迴路中的抗電磁干擾、旁路、去耦合、諧波濾波、緩衝電容等電子設備領域。)
- For special: railway vehicle, train, wind turbines and solar energy generation.
(適用於軌道車輛、火車、電聯車、風力發電機、太陽能發電系統。)

依據標準 *Standard:*

- JIS4908、CNS4327、UL810 for AC capacitor
- JIS4905、CNS4328、IEC60252-2 for aluminum electrolytic motor starting capacitor
- IEC60252-1、EN60252-1 for motor running capacitor
- IEC61048、IEC61049 for lighting device application capacitor
- IEC61071 for power electronics application capacitor
- IEC60831-1 for low voltage three phase power factor correction capacitor

Standardization

MPE rated voltage DC/ MPE 額定電壓範圍		150V, 180V, 250V, 300V, 350V, 400V, 630V	
MPP rated voltage AC and DC/ MPP 額定電壓範圍		180Vac ~ 1000Vac/ 100V ~ 2500V	
Option/ 項目	JIS4908 capacitor withstand voltage test/ 耐電壓測試		
	Between terminals (T-T) 端子間		Terminals to case (T-C) 端子與殼間
Method/ 測試方法	Rated voltage × 1.75 for 60 seconds		Rated voltage × 2 + 1000Vac (2000Vac min.) for 60 seconds
Dissipation factor (Tan δ)/ 損失角		MPE 30×10 ⁻⁴ or 0.3% max.	MPP 10×10 ⁻⁴ or 0.1% max.

Air tight test

Accord to the instruction below it should not leak oil

依照下表方式進行氣密試驗，電容器不可發生漏油或任何內部液態絕緣含浸液洩漏，始可通過測試。

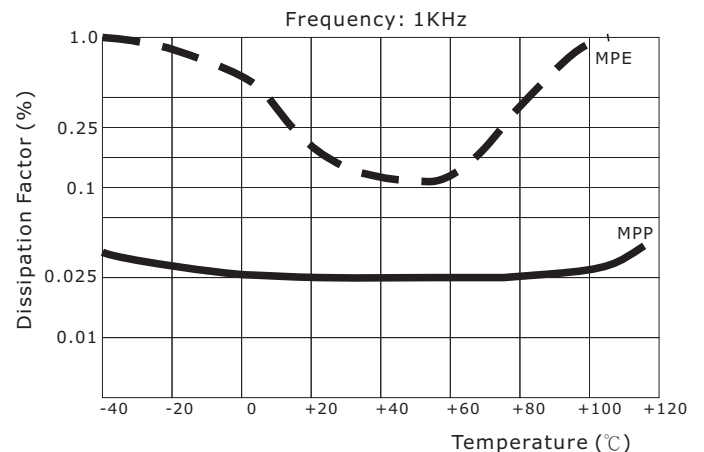
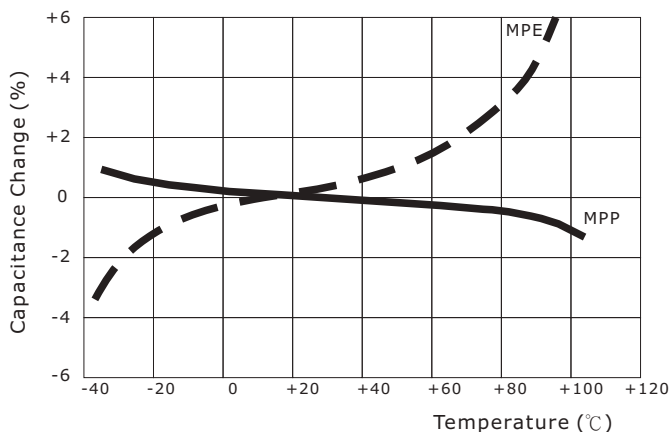
Model		Temperature °C 恆溫裝置溫度	Heating time 加熱時間
MP	60 °C	75 ± 3	15 minutes/ 15 分鐘
	40 °C	70 ± 3	15 minutes/ 15 分鐘
PPO 70 °C		85 ± 3	1 hour/ 1 小時
MPE 70 °C	MPP 85 °C	95 ± 3	1 hour/ 1 小時

電容器溫度與頻率特性 *Capacitor properties:*

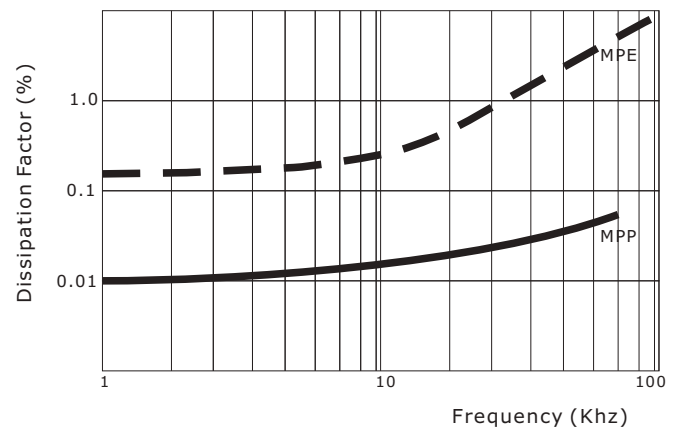
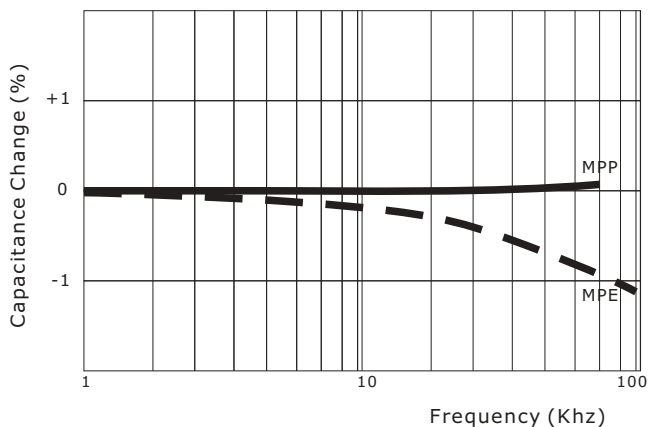
Metallized film capacitor properties as below:

MPP 與 MPE 金屬化膜電容器，在不同溫度與頻率下，電容量變化曲線圖表如下：

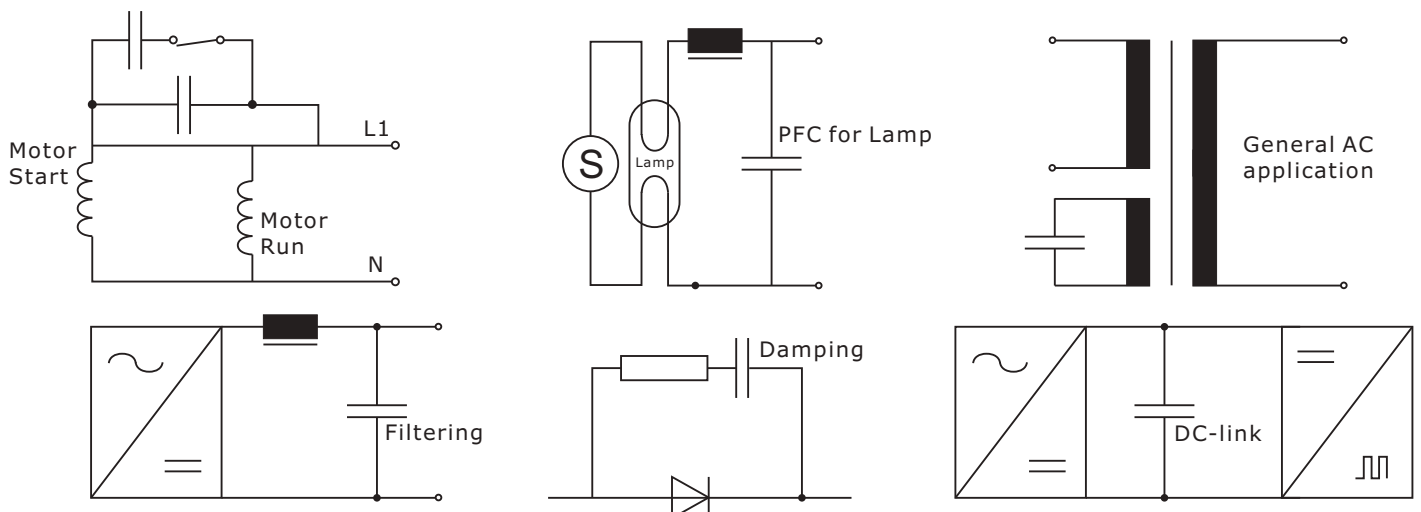
Temperature Characteristic



Frequency Characteristic



電容器採購與應用指引 *Capacitor general application guide:*



If you choose our capacitors, please kindly provide us with your information on the following points.

1. Rated capacity or capacitance and allowed tolerance/
2. Rated voltage or working voltage/
3. Number of phase/
4. Use/
5. Ambient temperature/
6. Shape/
7. specification applied.

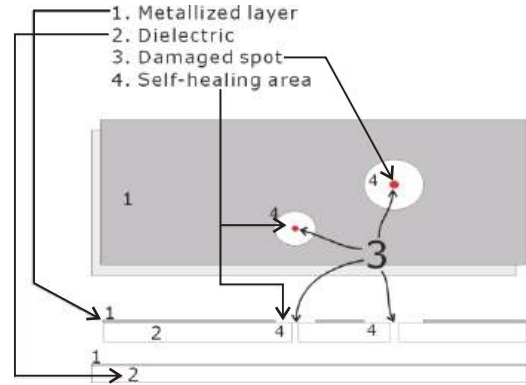
Any special design as customized is also welcome. 任何選購電容器的疑問，請告知我們您的需求如下：1. 額定靜電容量與容值容許誤差 2. 使用額定電壓或工作電壓 3. 相數 4. 用途 5. 使用溫度範圍 6. 外型 7. 其他。我們堅持台灣本地生產製造，發揮品質穩定、有彈性、溝通佳的優點，協助解決問題，少量、客製規格，可以接受。

電容器安全性 **CAPACITOR SAFETY DESCRIPTION**

- Self-healing is available to all types of metallized capacitor which was printed SH marks.
- Pressure sensitive interrupt function only available for RSDU type/ P2/ 10000AFC protected.
- Segment internal fuse function available to all types of metallized capacitor/ P2 safety optional.
- 所有蒸鍍金屬薄膜電容器皆具有自癒功能，能在僅數微秒內的時間，排除電容內部的輕微故障，電容器得以持續正常運作。
- 壓力感應斷路防爆功能僅適用於 RSDU-type 電容器，其壓力斷開防爆動作機制能避免電容器因損壞發生爆裂，確保安全。
- 格狀保險絲式防爆代號 P2，可選購並適用於所有蒸鍍金屬薄膜電容器，具備複數極微小保險絲，避免電容器故障損壞。

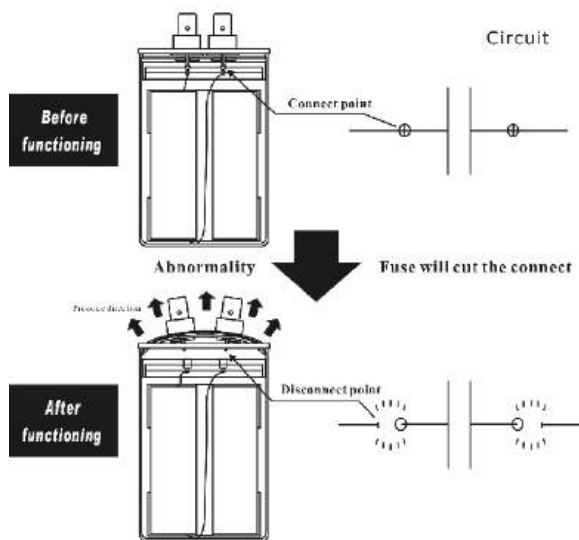
Self - healing mechanism (蒸鍍金屬電容器自癒機制)

Capacitor storage electrons by dielectric which adopts metallized films as intermediate; this kind metallized capacitor with self-healing capabilities when abnormal voltage occur to the loading, in case excessive voltage loading to damage the dielectric material, the metallized layer around the damaged spot will disappear instantly, and insulation is restored immediately.



Pressure sensitive interrupt function (電容器壓力感應斷路防爆功能)

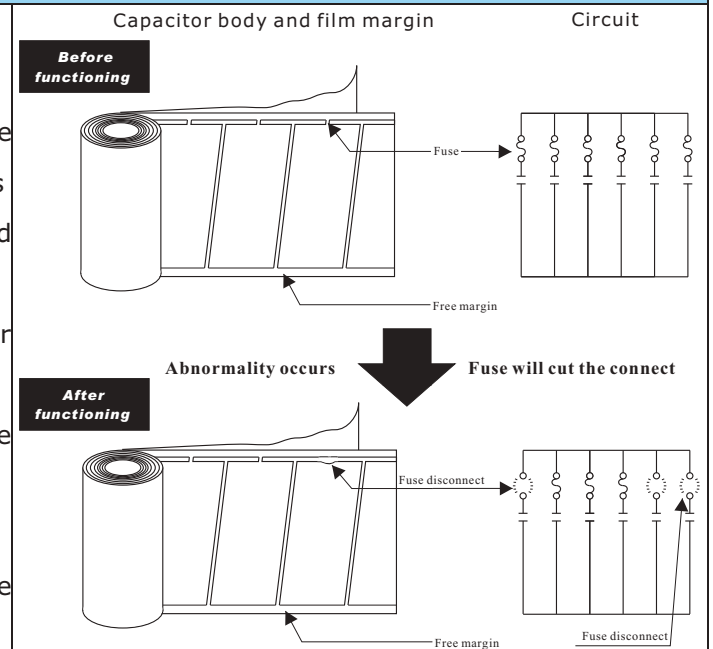
Pressure sensitive protected device and principle
For 10,000 AFC for safety environment



Self-healing capacitor operation in the circuit exceed to its designed life. An increasing number of self-healing breakdowns by the overloading may causes rising pressure inside the capacitor, the short circuit even occurs. To prevent the failure from bursting, designed capacitors are fitted with an obligatory disconnect action mechanism. The action based on a designed weak spot at the internal connection. When abnormal occurs, the rising pressure causes the capacitor to bulge its malleable metal cover and shell. As a result, designed weak connecting points are separated from the circuit and the current path is interrupted.

Segment internal fuse function (電容器格狀保險絲式防爆功能)

Dielectric breakdown caused by overloading may damage the capacitor to melted and even bursting to end the product life. To prevent such an occurrence, the P2 capacitor with an infinite numbers small capacitors which connected in parallel by metallized film that could avoid the relative disaster mentioned. Designed segment metallized film creates hundreds or thousands of fuses to protect the capacitor element. Fuse disconnection only occur to the failure area of the damage spot. When disconnection happened, the capacitor element loses few capacitances. Remained good small capacitors would continue to be used in the circuit and keep the capacitor element working.



P01M series/ MFR type

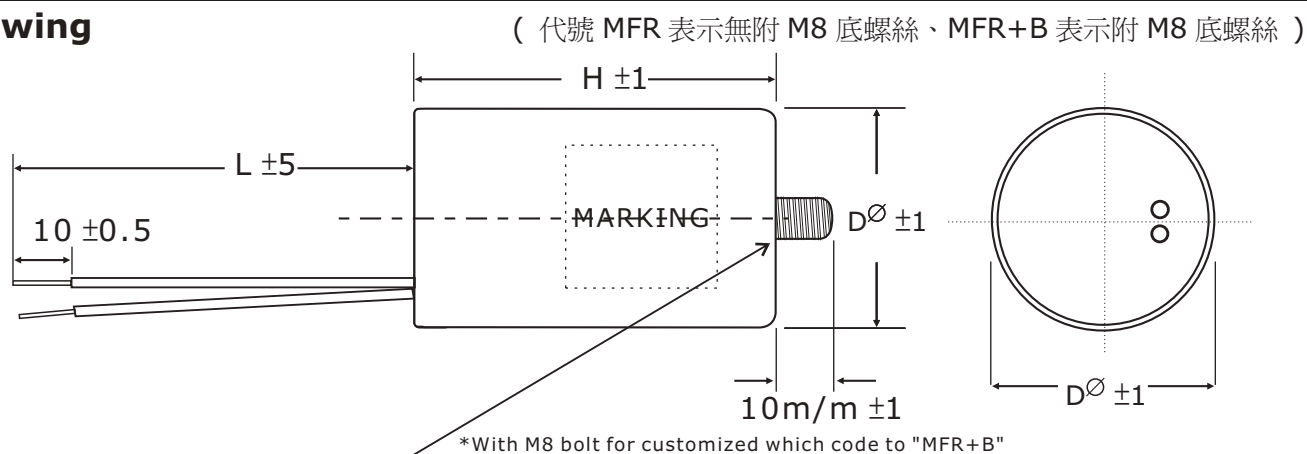
- UL certificated/ E231814
- Self-healing type
- Low dissipation factor
- Flame retardant end seal
- Inner discharge resistor for optional
- M8 mounting bolt for customized optional
- Operation life of 10,000hrs/ 30,000hrs/ 60,000hrs for optional

Application: MFR is widely used as power factor correction for light application such as lamps, ballast and electric motor such as air-conditioner, refrigerator, washing machine, motor pump, fan motor and electrical power tool and lighting application. 自癒式電容器，適用於各式電機馬達和功率因數改善用途，風扇、軸流風扇、冷氣機、除濕機、抽水機、泵浦、攪拌機、送風馬達、裁切機，內附放電電組為選購，亦適用於和氣體放電燈與其它燈具照明領域，一般與防爆保安材質可選用，美國 UL 安規認證。

Specifications

Standard/ 適用標準	IEC-60252-1, JIS4908, UL810
Capacitance range/ 電容量範圍	2 ~ 100 μ F (200 μ F max.)
Capacitance tolerance/ 容量誤差	+10-5% (U), $\pm$ 5% (J), $\pm$ 10% (K)
Rated voltage range/ 額定電壓範圍	250 ~ 500VAC at 50/60Hz (600VAC max.)
Temperature range/ 溫度範圍	-25 ~ +70 $^{\circ}$ C, -25 ~ +85 $^{\circ}$ C(100 $^{\circ}$ C max. optional)
Tan δ % / 損失角	0.1% max. by 220VAC at 50/60Hz, 25 $^{\circ}$ C
Withstand between terminals/ 端子間耐壓	Rated voltage $\times$ 175% for 60 sec
Withstand terminal to case/ 端子外殼間耐壓	2000VAC for 60 sec
Safety class/ 安全保護等級	P0 for standard/ P2 for optional
Leading/ 引線方式	UL1015/ UL3122 wires

Drawing



Dimension (Unit: mm) (UL designation: **MPPRC-XX** series)

Capacitance (μ F)	350 Vac		Capacitance (μ F)	450 Vac	
	D ϕ	H		D ϕ	H
10	35	52	18	51	65
12	35	52	20	51	65
14	35	60	25	45	90
16	35	60	30	51	90
20	35	70	35	51	90
25	40	70	40	56	90
30	40	85	50	56	120

Above dimensions are according to our standard design and might be altered without notice.

Contact with us for details and dimensions further. (請來電聯繫客製品或更多詳細規格與完整尺寸表)

P01M series/ MFR+B type

P03R series/ RT/ RT+B type

- UL certificated/ E231814
- Self-healing and explosion-proof
- Metallic shell for outdoor using
- Low dissipation factor
- Inner discharge resistor included
- M8 mounting bolt/ quick connector of wiring
- Operation life of 10,000hrs/ 30,000hrs optional

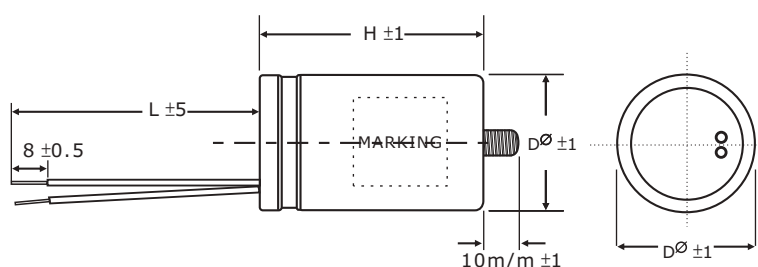
Application: MFR+B, RT and RT+B compliant to IEC61048/ 61049 are widely used as power factor correction for light application such as fluorescent lamp, mercury lamp, natrium lamp, ceramic metal halide lamp, metal halide lamp. 自癒式氣體放電燈用電容器，全金屬外殼，專為水銀燈、高低壓鈉燈、複金屬燈、陶瓷複金屬燈等用途而設計，壽命長，具可靠防爆保安性能。特殊耐溫條件 105℃ 長壽命使用防爆保安型

Specifications 電容器可生產，亦可提供客戶最多 6 條導線的引出加工，便於安裝使用，需來電聯繫訂製。

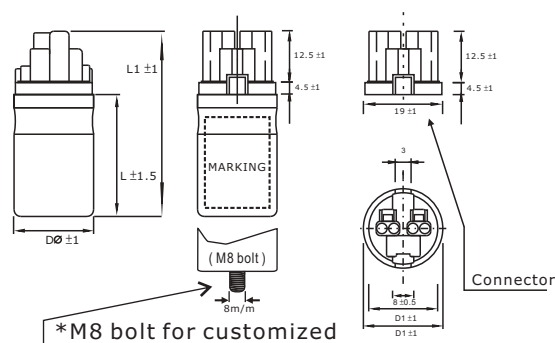
Standard/ 適用標準	IEC-61048 61049, JIS4908, UL810
Capacitance range/ 電容量範圍	2 ~ 100μF
Capacitance tolerance/ 容量誤差	+10-5% (U), ±5% (J), ±10% (K)
Rated voltage range/ 額定電壓範圍	150 ~ 450VAC at 50/60Hz (540VAC max.)
Temperature range/ 溫度範圍	-25 ~ +70℃, -25 ~ +85℃ (105℃ max. optional)
Tanδ% / 損失角	0.1% max. by 220VAC at 50/60Hz, 25 °C
Withstand between terminals/ 端子間耐壓	Rated voltage × 200% for 60 sec
Withstand terminal to case/ 端子外殼間耐壓	2000VAC for 60 sec
Safety class/ 安全保護等級	P2 for standard
Leading/ 引線方式	UL1015 or UL3122 wires/ Quick connector

Drawing (UL designation: **MPPRC+B-XX** series and **RT-XX** series)

MFR+B - type:



RT/ RT+B - type:



Dimension (Unit: mm)

Capacitance (μF)	250 Vac		Capacitance (μF)	450 Vac	
	DΦ	H/ L		DΦ	H/ L
10	35	46	10	35	65
12	35	46	20	45	65
14	35	60	25	51	65
16	35	60	35	51	90
20	35	65	40	51	120
25	40	65	50	56	90
39	45	65	60	56	120

Above dimensions are according to our standard design and might be altered without notice.

Contact with us for details and dimensions further. (請來電聯繫客製品或更多詳細規格與完整尺寸表)

B series

- TUV certificated/ EN60252-1
- General AC applications
- Self-healing type
- Very low dissipation factor
- Flame retardant end seal
- Operation life 10,000hrs guarantee

R 50263652

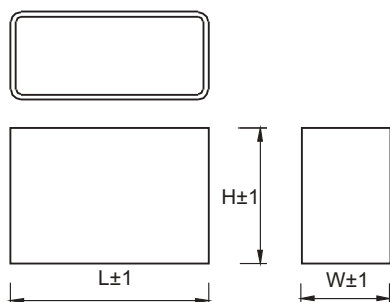
Application: B series are widely used as power factor correction in inverter, converter, power supply, UPS and electric motor such as air-conditioner, refrigerator, dishwasher, washing machine, motor pump, fan motor, electrical power tool and ballast. 通過德國 TUV 嚴格的壽命測試與型式認證，完全符合歐盟電容器規範，低損失，保證額定 1 萬小時以上操作壽命，容量衰減不超過 3%，適用於各式電機馬達、泵浦、風扇、AC 軸流風扇、冷氣家電、電冰箱、洗乾衣機、脫水機、攪拌機、電動機械工具、節能燈、逆變器濾波等、

Specifications 亦適用於電源供應器內、以及不斷電系統等電力電子用途。

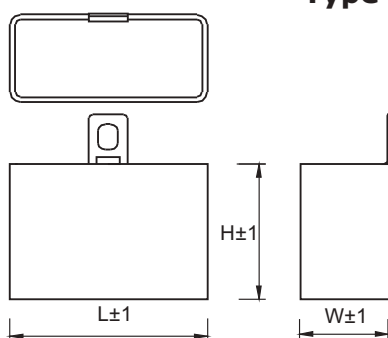
Standard/ 適用標準	IEC-60252-1/ EN60252-1
Capacitance range/ 電容量範圍	0.5 ~ 25 μ F
Capacitance tolerance/ 容量誤差	+10-5% (U), $\pm$ 3% (I), $\pm$ 5% (J), $\pm$ 10% (K)
Rated voltage range/ 額定電壓範圍	450VAC at 50/60Hz (10000hrs life certificated)
Temperature range/ 溫度範圍	-40 ~ +85 $^{\circ}$ C
Dissipation factor (Tan δ %)/ 損耗因數(損失角)	0.1% max. by 220Vac at 50/60Hz, 25 $^{\circ}$ C
Withstand between terminals/ 端子間耐壓	Rated voltage $\times$ 200% for 60 sec
Withstand terminal to case/ 端子外殼間耐壓	2600VAC for 60 sec
Safety class/ 安全保護等級	P0/ S0 for standard/ P2/ S3 for optional
Leading/ 引線方式	UL1015 wires/ cable wires/ AMP187 or AMP250 faston terminals/ Tin-plated copper wires

Drawing

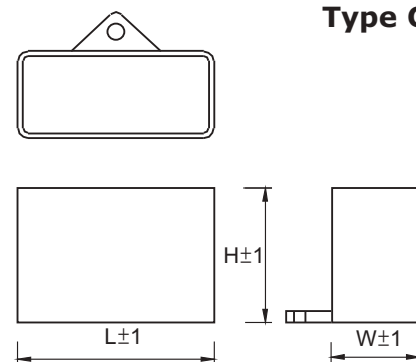
Type A.



Type B.



Type C.



Dimension (Unit: mm)

P/N code	Capacitance (μ F)	L	H	W	P/N code	Capacitance (μ F)	L	H	W
B105*****	1.0	37	15	24	B405*****	4	51	22	32
B155*****	1.5	37	15	26	B505*****	5	51	25	36
B205*****	2.0	38	17	26	B605*****	6	51	25	36
B225*****	2.2	37	19	29	B805*****	8	51	30	40
B305*****	3.0	39	22	32	B106*****	10	51	30	40
B335*****	3.3	39	22	32	B126*****	12	59	35	45
B355*****	3.5	49	20	30	B156*****	15	59	35	45

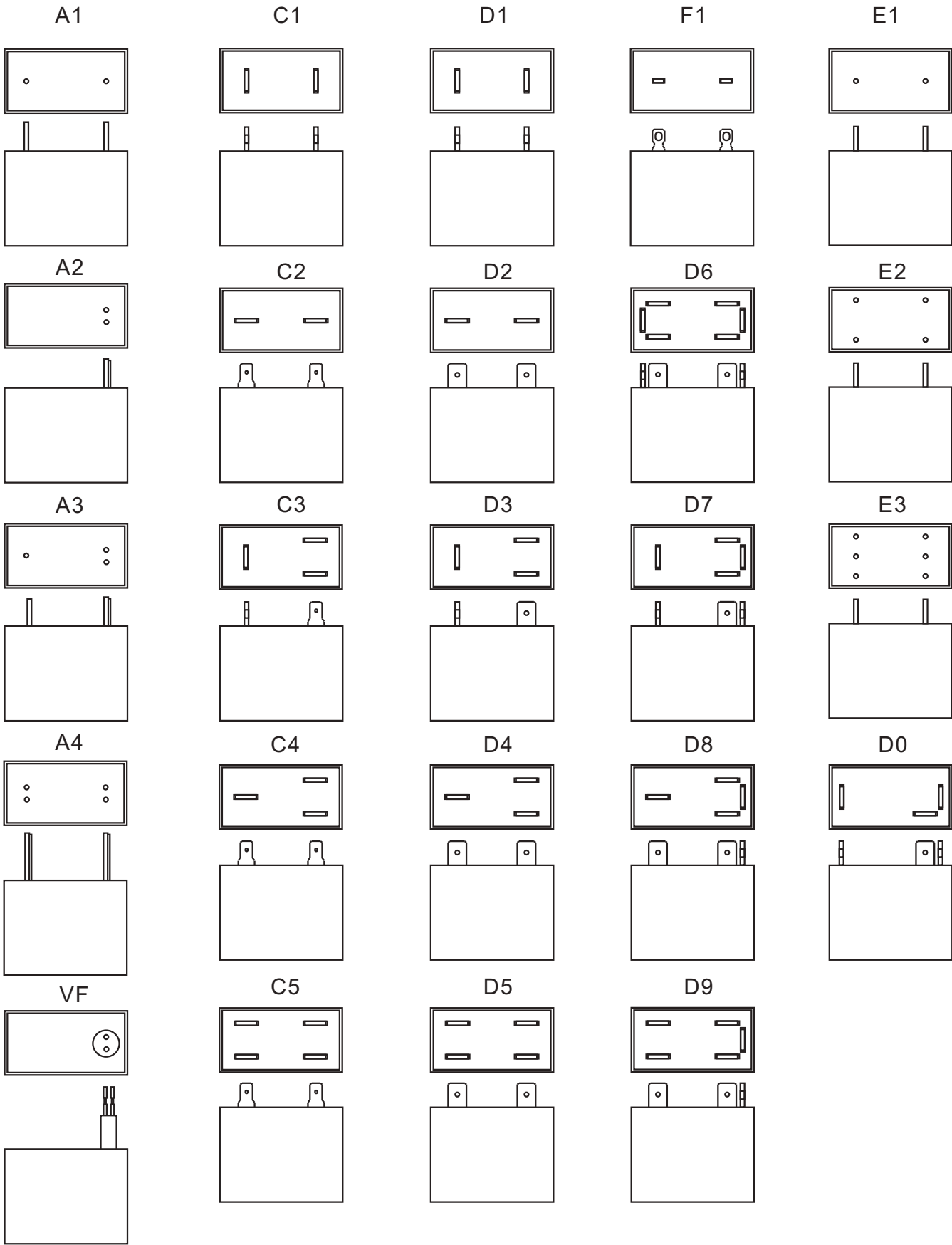
Above dimensions are according to our standard design and might be altered without notice.

Contact with us for details and dimensions further. (請來電聯繫客製品或更多詳細規格與完整尺寸表)

Leadings

CODE	A1 - A4	C1 - C5	D0 - D9	E1 - E3	F1	VF
SPEC	UL1015 wires	Faston terminal AMP187 4.75mm width	Faston terminal AMP250 6.35mm width	Tinplated copper wire dia 0.8 or 1.0mm	Soldering terminal 4mm width	H05VVF cable wire

Leadings code



P02B series/

BT type, BTU type

- UL certificated/ E231814
- Self-healing type
- Low dissipation factor
- Flame retardant end seal
- Operation life of 5,000hrs/ 10,000hrs/ 30,000hrs for customized optional

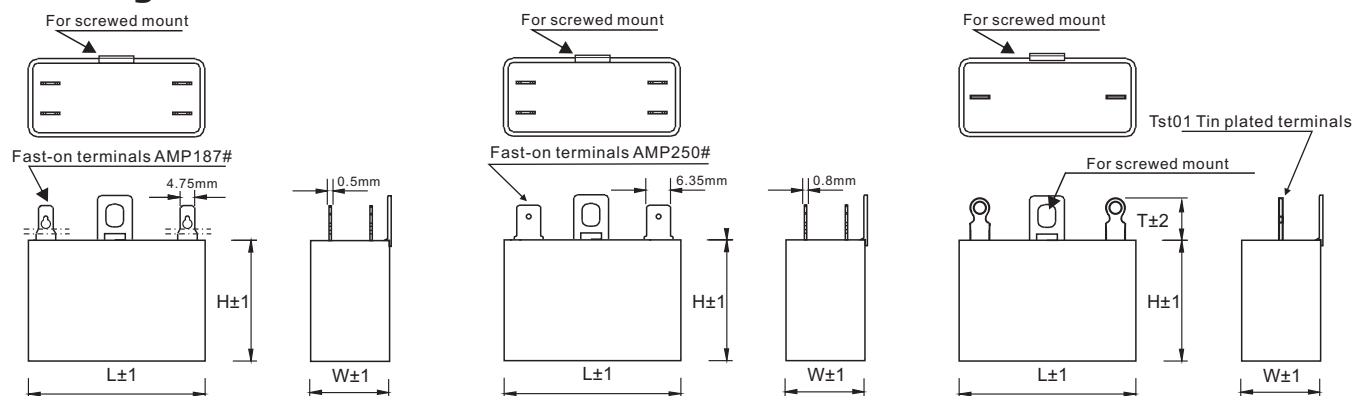
Application: BT and BTU are widely used as power factor correction in electric motor such as air-conditioner, refrigerator, washing machine, motor pump, fan motor and electrical power tool.

自癒式電容器，適用於各式電機馬達和功率因數改善用途，一般與防爆保安材質可選用，美國 UL 安規認證。

Specifications

Standard/ 適用標準	IEC-60252-1, JIS4908, UL810
Capacitance range/ 電容量範圍	0.5 ~ 100μF (BT)/ 0.5 ~ 30μF (BTU)
Capacitance tolerance/ 容量誤差	+10-5% (U), ±5% (J), ±10% (K)
Rated voltage range/ 額定電壓範圍	180 ~ 450VAC at 50/60Hz (550VAC max.)
Temperature range/ 溫度範圍	-25 ~ +70°C, -25 ~ +85°C
Tanδ% / 損失角	0.1% max. by 220VAC at 50/60Hz, 25°C
Withstand between terminals/ 端子間耐壓	Rated voltage × 175% for 60 sec
Withstand terminal to case/ 端子外殼間耐壓	2000VAC for 60 sec
Safety class/ 安全保護等級	P0 for standard/ P2 for optional
Leading/ 引線方式	AMP187 or AMP250 faston terminals/ Tst01 soldering terminals

Drawing



Dimension (Unit: mm)

Code	Capacitance (μF)	250 Vac (BT)			Code	Capacitance (μF)	450 Vac (BTU)		
		L	H	W			L	H	W
BT-11	6	37	15	24	BTU-1	1	37	12.5	24
BT-12	7	38	17	26	BTU-3	2	38	17	26
BT-13	8	37	19	29	BTU-5	3	37	19	29
BT-15	10	37	19	29	BTU-9	5	51	22	32
BT-17	12	39	22	32	BTU-12	7	51	25	36
BT-18	14	49	20	30	BTU-16	8	51	30	40
BT-20	16	51	22	32	BTU-18	12	59	35	45

Above dimensions are according to our standard design and might be altered without notice.

Contact with us for full details and dimensions. (請來電聯繫客製品或更多詳細規格與完整尺寸表)

P02B series/ BLT type, BLU type

- UL certificated/ E231814
- Self-healing type
- Low dissipation factor
- Flame retardant end seal
- Operation life of 5,000hrs/ 10,000hrs/ 30,000hrs for customized optional

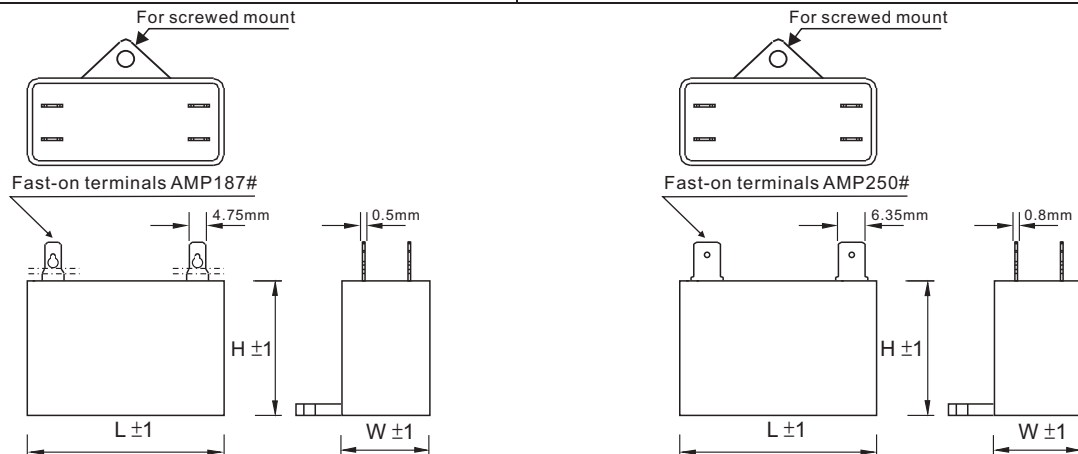
Application: BLU is widely used as power factor correction in electric motor such as air-conditioner, refrigerator, washing machine, motor pump, fan motor and electrical power tool.

自愈式電容器，適用於各式電機馬達和功率因數改善用途，一般與防爆保安材質可選用，美國 UL 安規認證。

Specifications

Standard/ 適用標準	IEC-60252-1, JIS4908, UL810
Capacitance range/ 電容量範圍	1 ~ 30 μ F
Capacitance tolerance/ 容量誤差	+10-5% (U), $\pm$ 5% (J), $\pm$ 10% (K)
Rated voltage range/ 額定電壓範圍	250 ~ 450VAC at 50/60Hz (550VAC max.)
Temperature range/ 溫度範圍	-25 ~ +70°C, -25 ~ +85°C
Tan δ % / 損失角	0.1% max. by 220VAC at 50/60Hz, 25°C
Withstand between terminals/ 端子間耐壓	Rated voltage $\times$ 175% for 60 sec
Withstand terminal to case/ 端子外殼間耐壓	2000VAC for 60 sec
Safety class/ 安全保護等級	P0 for standard/ P2 for optional
Leading/ 引線方式	AMP187 or AMP250 faston terminals/ Tst01 soldering terminals

Drawing



Dimension (Unit: mm)

Code	Capacitance (μ F)	450 Vac (BLT)			Code	Capacitance (μ F)	400 Vac (BLU)		
		L	H	W			L	H	W
BLT-1	1	37	12.5	24	BLU-6	1	37	12.5	24
BLT-2	1.5	37	15	24	BLU-8	2	37	15	24
BLT-3	2	38	17	26	BLU-10	3	38	17	26
BLT-4	2.5	39	19	29	BLU-12	4	39	22	32
BLT-5	3	39	22	32	BLU-14	5	50	20	30
BLT-6	3.5	39	22	32	BLU-16	6	51	22	32
BLT-7	4	51	22	32	BLU-18	7	51	25	36

Above dimensions are according to our standard design and might be altered without notice.

Contact with us for details and dimensions further. (請來電聯繫客製品或更多詳細規格與完整尺寸表)

P02B series/ BL type

- UL certificated/ E231814
- Self-healing type
- Low dissipation factor
- Flame retardant end seal
- Internal discharge resistor optional
- Up to 6 × leading wires execution
- Operation life of 5,000hrs/ 10,000hrs/ 30,000hrs for customized optional

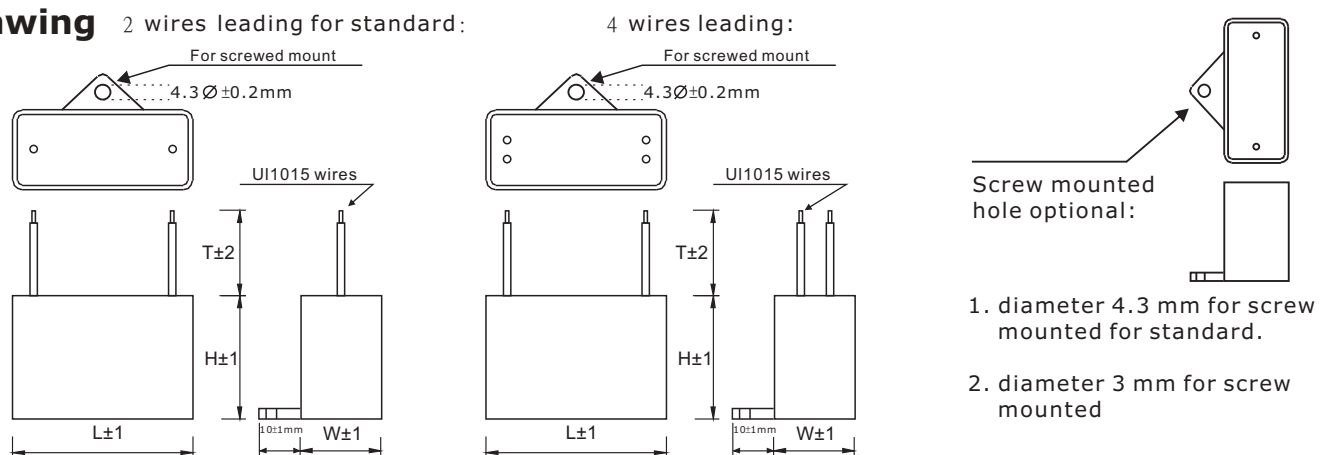
Application: BL is widely used as power factor correction in electric motor such as air-conditioner, refrigerator, washing machine, motor pump, fan motor and electrical power tool.

美國 UL 安規認證，自愈式電容器，適用於各式電機馬達和功率因數改善用途：風扇、軸流風扇，亦適用於各式氣體放電燈，一般型與防爆保安材質可選用，可依客戶需求提供最多 6 條導線的引出加工，或內置放電電阻。

Specifications

Standard/ 適用標準	IEC-60252-1, JIS4908, UL810
Capacitance range/ 電容量範圍	1 ~ 20 μ F
Capacitance tolerance/ 容量誤差	+10-5% (U), $\pm$ 5% (J), $\pm$ 10% (K)
Rated voltage range/ 額定電壓範圍	250 ~ 400VAC at 50/60Hz (600VAC max.)
Temperature range/ 溫度範圍	-25 ~ +70°C, -25 ~ +85°C
Tan δ % / 損失角	0.1% max. by 220VAC at 50/60Hz, 25°C
Withstand between terminals/ 端子間耐壓	Rated voltage $\times$ 175% for 60 sec
Withstand terminal to case/ 端子外殼間耐壓	2000VAC for 60 sec
Safety class/ 安全保護等級	P0 for standard/ P2 for optional
Leading/ 引線方式	UL1015 wires

Drawing



Dimension (Unit: mm)

Code	Capacitance (μ F)	250 Vac			Code	Capacitance (μ F)	400 Vac		
		L	H	W			L	H	W
BL-5	3	32	12.5	21.5	BL-15	10	51	30	40
BL-6	3.5	32	14	25	BL-16	12	51	30	40
BL-7	4	37	12.5	24					
BL-8	4.5	37	12.5	24					
BL-9	5	37	15	24					
BL-10	6	37	15	24					
BL-11	7	38	17	26					

Above dimensions are according to our standard design and might be altered without notice.

Contact with us for details and dimensions further. (請來電聯繫客製品或更多詳細規格與完整尺寸表)

P02B series/ BXF type

- UL certificated/ E231814
- General AC applications
- Self-healing type
- Very low dissipation factor
- Flame retardant end seal
- High stability and reliability
- Up to 6 × terminals execution
- Operation life of 10,000hrs/ 30,000hrs for customized optional

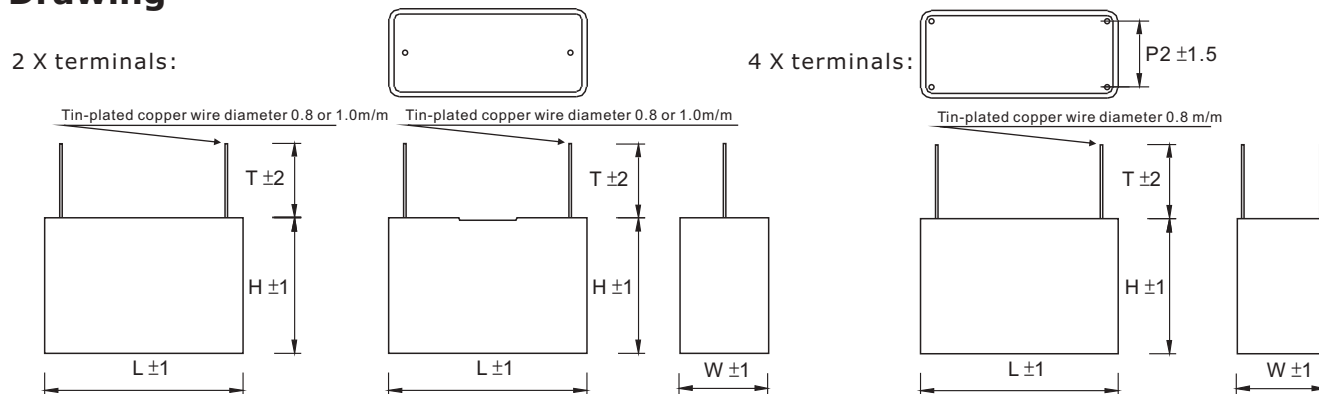
Application: BXF leads copper wires which is widely used as snubber, SCR, power factor correction or pulse application in inverter, converter, power supply, UPS and electric motor such as air-conditioner, refrigerator and electrical power tool. Customized available to multi-leads and heavy duty material.

自愈式電容器，採用紅銅鍍錫導線，適合於高頻、高壓、交流、直流等應用，可耐大電流，一般與防爆保安材質可選用，美國 UL 安規認證。另可針對客戶端耐大電流低阻抗需求，提供多導線加工與特殊重型電力材質選用。

Specifications

Standard/ 適用標準	IEC-60252-1, JIS4908, UL810
Capacitance range/ 電容量範圍	0.1 ~ 25 μ F
Capacitance tolerance/ 容量誤差	+10-5% (U), $\pm$ 5% (J), $\pm$ 10% (K)
Rated voltage range/ 額定電壓範圍	150 ~ 500VAC at 50/60Hz (600VAC max.)
Temperature range/ 溫度範圍	-25 ~ +70°C, -25 ~ +85°C
Tan δ % / 損失角	0.1% max. at 50/60Hz, 120Hz and 1KHz, 25°C
Withstand between terminals/ 端子間耐壓	Rated voltage $\times$ 175% for 60 sec
Withstand terminal to case/ 端子外殼間耐壓	2000VAC for 60 sec
Safety class/ 安全保護等級	P0 for standard/ P2 for optional
Leading/ 引線方式	Tin-plated copper wires

Drawing



Dimension (Unit: mm)

Code	Capacitance (μ F)	250 Vac			Code	Capacitance (μ F)	400 Vac		
		L	H	W			L	H	W
BXF-1	1	32	10	21	BXF-29	1.85	37	15	24
BXF-4	2.2	32	11	21	BXF-31	2.2	37	15	26
BXF-7	3.3	32	13	23	BXF-34	3.3	37	19	29
BXF-15	7	38	17	26	BXF-37	4.7	49	20	30
BXF-19	10	37	19	29	BXF-41	6.8	51	22	32
BXF-21	14	49	20	30	BXF-42	8.8	51	25	36

Above dimensions are according to our standard design and might be altered without notice.

Contact with us for details and dimensions further. (可來電聯繫提出需求洽詢更多詳細規格與尺寸)

P03R series/ R type

- UL certificated/ E231814
- Self-healing type
- Very low dissipation factor
- Compact metallic shell for outdoor using
- High stability and reliability
- Oil filled without P'CB
- M8 mounting bolt for customized optional

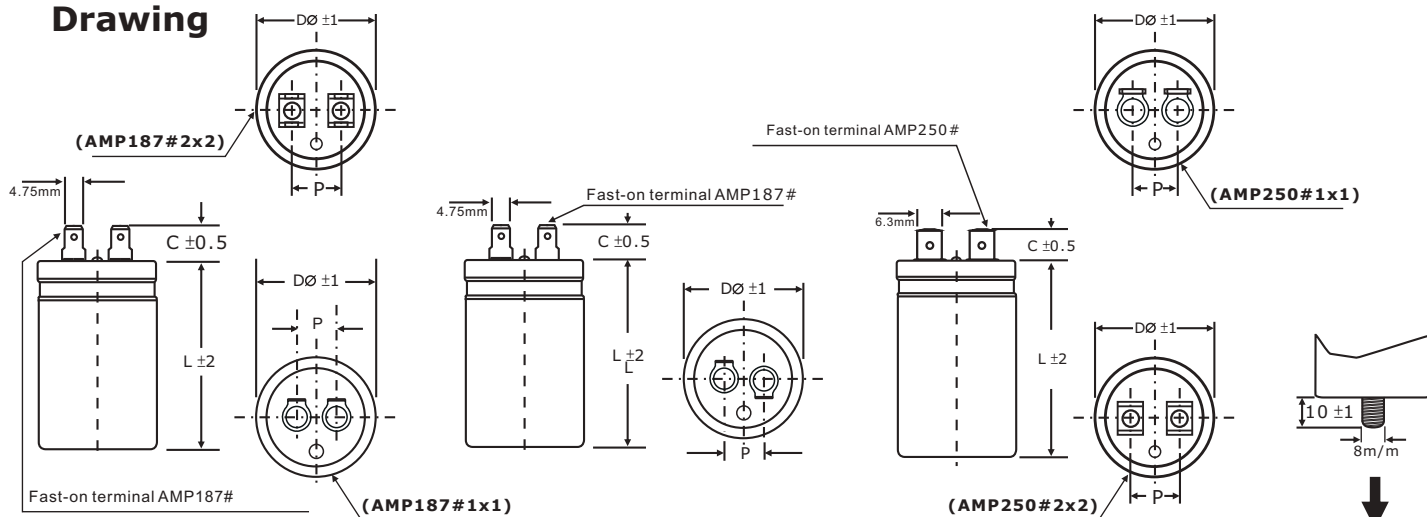
Application: R type is widely used as power factor correction in electric motor such as air-conditioner, refrigerator, washing machine, motor pump, fan motor and electrical power tool under 50/ 60Hz.

自愈式電容器，小型化金屬外殼，高絕緣阻抗，散熱極佳，多種引腳方式，易於組裝，適用於頻率 50Hz 和 60Hz 交流電源供電的各式單相電動機馬達和功率因數改善用途，一般與防爆保安材質可選用，美國 UL 安規認證。

Specifications

Standard/ 適用標準	IEC-60252-1, JIS4908, UL810
Capacitance range/ 電容量範圍	0.5 ~ 200 μ F
Capacitance tolerance/ 容量誤差	+10-5% (U), $\pm$ 5% (J), $\pm$ 10% (K)
Rated voltage range/ 額定電壓範圍	150 ~ 450VAC at 50/60Hz (600VAC max.)
Temperature range/ 溫度範圍	-25 ~ +70 $^{\circ}$ C, -25 ~ +85 $^{\circ}$ C
Tan δ % / 損失角	0.1% max. by 220VAC at 50/60Hz, 25 $^{\circ}$ C
Withstand between terminals/ 端子間耐壓	Rated voltage $\times$ 200% for 60 sec
Withstand terminal to case/ 端子外殼間耐壓	2000VAC for 60 sec
Safety class/ 安全保護等級	P0 for standard/ P2 for optional
Leading/ 引線方式	Soldering or Faston terminals 187# and 250#

Drawing



Dimension (Unit: mm)

(*M8 bolt for customized which is code +B)
(*如選購電容器時底部需含M8螺絲，代碼表示為 +B)

Code	Capacitance (μ F)	250 Vac		Code	Capacitance (μ F)	450 Vac	
		D	L			D	L
RU25-XX	10	35	44	RU45-XX	3.5	30	44
RU25-XX	12	35	44	RU45-XX	4	35	44
RU25-XX	14	35	54/ 63	RU45-XX	5	35	44
RU25-XX	15	35	63	RU45-XX	6	35	63
RU25-XX	16	35	63	RU45-XX	7	35	63

Above dimensions are according to our standard design and might be altered without notice.

Contact with us for details and dimensions further. (請來電聯繫客製品或更多詳細規格與完整尺寸表)

P03R series/ RSDU type

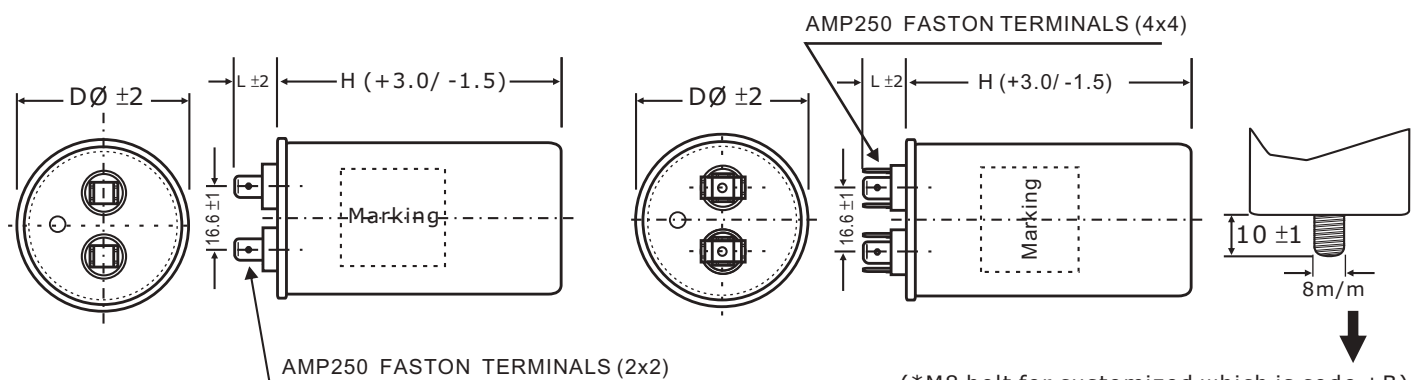
- UL certificated/ E497719
- Self-healing type
- Very low dissipation factor
- High stability and reliability
- P2/ 10,000AFC protected
- Oil filled without P'CB
- Inner discharge resistor for optional
- Metallic shell for outdoor using with M8 mounting bolt for customized optional
- Operation life of 10,000hrs for standard or 30,000hrs up to 100,000hrs for customized optional

Application: RSDU is widely used as power factor correction for power supply, UPS and electric motor such as air-conditioner, refrigerator, and washing machine. UL and cUL certification are both available. 防爆保安型自愈式電容器，通過美國與加拿大 10000AFC 防爆測試，全金屬外殼，採用真空灌注絕緣液體材料方式，達到長壽命，高穩定性，適用於各式電機馬達和功率因數改善用途，標準為額定電壓條件下達最少

Specifications 1 萬小時壽命，另可依客戶需求提供保證 3 萬小時以上至 10 萬小時使用壽命的規格。

Standard/ 適用標準	IEC-60252-1, JIS4908, UL810
Capacitance range/ 電容量範圍	1 ~ 350 μ F
Capacitance tolerance/ 容量誤差	+10-5% (U), $\pm$ 5% (J), $\pm$ 10% (K)
Rated voltage range/ 額定電壓範圍	180 ~ 480VAC at 50/60Hz (660VAC max.)
Temperature range/ 溫度範圍	-25 ~ +70°C standard, -25 ~ +85°C optional
Tan δ % / 損失角	0.1% max. by 220VAC at 50/60Hz, 25°C
Withstand between terminals/ 端子間耐壓	Rated voltage $\times$ 200% for 60 sec
Withstand terminal to case/ 端子外殼間耐壓	2600VAC for 60 sec
Safety class/ 安全保護等級	P2 for standard (Pressure sensitive interrupt)
Leading/ 引線方式	Faston terminals AMP250/ 6.35mm width
Mounting/ 安裝方式	Bracket for standard or M8 bolt for optional

Drawing



Dimension (Unit: mm)

Capacitance (μ F)	370 Vac		Capacitance (μ F)	480 Vac	
	DØ	H		DØ	H
20	40	75	15	45	70
30	40	95	20	40	100
40	45	95	25	45	100
50	51	95	35	51	100
60	51	100	45	56	120

Above dimensions are according to our standard design and might be altered without notice.

Contact with us for details and dimensions further. (請來電聯繫客製品或更多詳細規格與完整尺寸表)

P03R series/*RMS* type, *RMSU (RMSL)* type

- RMSU with UL certificate
- Metallic shell for outdoor using
- Made of electrolytes and aluminum foils
- Positive pressure safety vent
- High stability and reliability
- M3 screws or faston terminals leading
- Discharge resistor optional

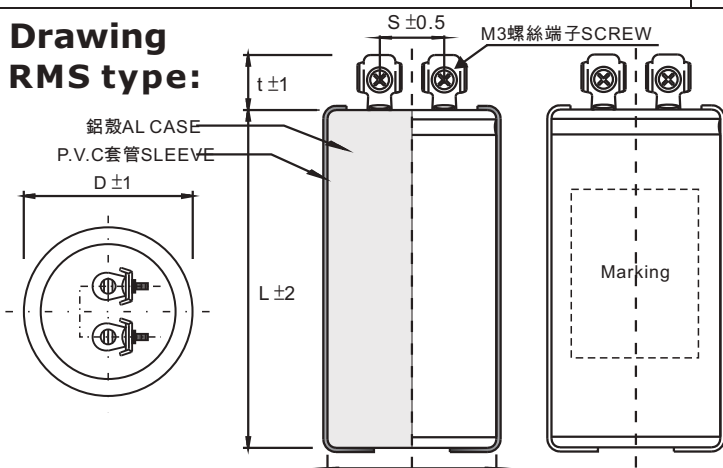
Application: RMS, RMSU and RMSL with features of compact size and high stability that are widely used as power factor correction for motor starting in electric motor such as compressor, motor and pump and be used to the vertical cloth cutting machine especially. 馬達啟動電容器，依照日本規範 JIS4905 進行製造與品管，高電容量與穩定性，長壽命，適用於壓縮機、馬達、吊車與泵浦，亦完全適合作為電

Specifications 剪刀、裁切機中的伊士文電容等用途。其中 RMSU 亦通過美國 UL 安規測試，安全可靠。

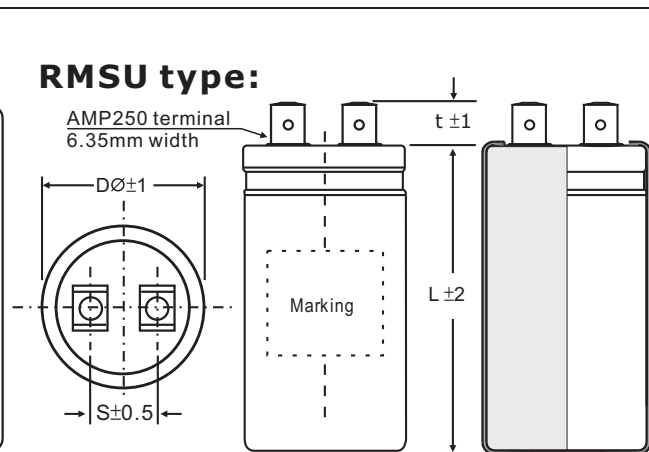
Standard/ 適用標準	JIS4905, UL810, CNS4238
Capacitance range/ 電容量範圍	25 ~ 1500 μ F
Capacitance tolerance/ 容量誤差	+20-0% standard or +/-10% option
Rated voltage range/ 額定電壓範圍	110 ~ 330VAC at 50/60Hz
Temperature range/ 溫度範圍	-25 ~ +65°C
Tan δ % / 損失角	Shall not exceed 0.1 or 10% at 120Hz, 25°C
Withstand between terminals/ 端子間耐壓	Rated voltage $\times$ 140% for 30 sec
Withstand terminal to case/ 端子外殼間耐壓	2000VAC for 60 sec
Leading/ 引線方式	Terminals with M3 screw mounting or AMP250
Mounting/ 安裝方式	Bracket

Drawing

RMS type:



RMSU type:



Dimension (Unit: mm) $D \pm 1$

Capacitance (μ F)	125 Vac		Capacitance (μ F)	250 Vac	
	D Φ	L		D Φ	L
100	35	60	100	35	70
150	35	60	150	40	70
200	35	70	200	40	70
250	35	70	250	40	70
300	40	90	300	45	90
400	40	90	400	45	90

Above dimensions are according to our standard design and might be altered without notice.

Contact with us for details and dimensions further. (請來電聯繫客製品或更多詳細規格與完整尺寸表)

P03R series/ RMST type

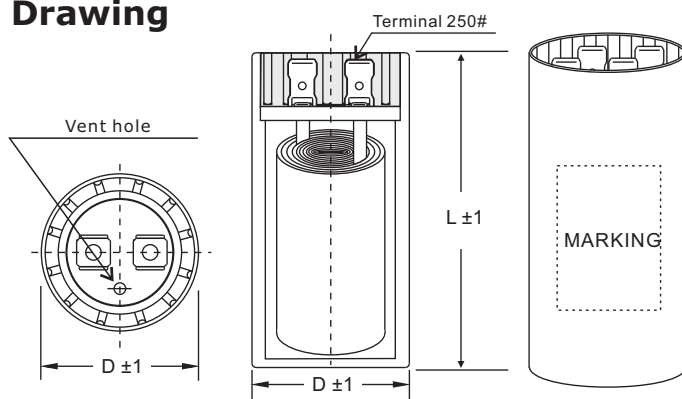
- UL certificated/ E359392
- Phenolic shell end seal
- Made of electrolytes and aluminum foils
- Positive pressure safety vent
- Low tangent of the loss angle
- High stability and reliability
- Faston terminal leading
- Discharge resistor optional

Application: RMST with features of long operation life and high stability that are widely used as power factor correction for motor starting in electric motor such as cutting machine, vertical cloth cutting machine, compressor, motor and pump. 馬達啟動電容器，通過美國 UL 安規測試，採用酚醛外殼封裝，並依照日本規範 JIS4905 進行製造與品管，完全符合 IEC60252-2 壽命耐受試驗，使用壽命長，特別適用於布料與皮革製作領域設備如：針車馬達、電剪刀、切布機與工業裁剪機內的伊士文電容用途；亦完全適合壓縮機、馬達與泵浦等啟動用途。另可選購塑膠護套，外置放電電阻，可應用在防火花場合或達到保護等目的。

Specifications

Standard/ 適用標準	JIS4905, UL810, CNS4238, IEC60252-2
Capacitance range/ 電容量範圍	25 ~ 1500 μ F
Capacitance tolerance/ 容量誤差	+20-0% standard or +/-10% option
Rated voltage range/ 額定電壓範圍	110 ~ 330VAC at 50/60Hz
Temperature range/ 溫度範圍	-25 ~ +70°C
Tan δ % / 損失角	Shall not exceed 0.1 or 10% at 120Hz, 25°C
Withstand between terminals/ 端子間耐壓	Rated voltage $\times$ 140% for 30 sec
Withstand terminal to case/ 端子外殼間耐壓	2000VAC for 60 sec
Leading/ 引線方式	Dual faston terminal 250# with 6.35mm width Or leading PVC wire is available to optional
Mounting/ 安裝方式	Bracket

Drawing



Dimension (Unit: mm)

Capacitance (μ F)	125 Vac		Capacitance (μ F)	250 Vac	
	D Φ	L		D Φ	L
88 ~ 106	37	70	88 ~ 106	40	80
233 ~ 280	37	70	233 ~ 280	46	86
270 ~ 324	40	80	270 ~ 324	46	106
340 ~ 408	46	86	540 ~ 648	46	106
540 ~ 648	46	106	829 ~ 995	51	116

Above dimensions are according to our standard design and might be altered without notice.
Contact with us for details and dimensions further. （請來電聯繫客製品或更多詳細規格與完整尺寸表）

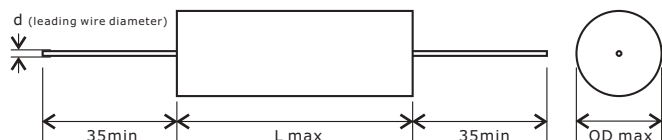
P01M series/MEA type, MEF type

- Made of metallized polyester film
- Non-inductive
- High capacitance
- Stability and reliability
- For general audio and DC application

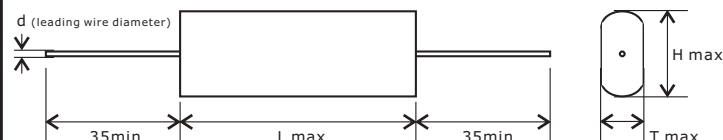
Specifications

Standard/ 適用標準	JIS C5110
Capacitance range/ 電容量範圍	0.01 ~ 10 μ F
Capacitance tolerance/ 容量誤差	±5% (J), ±10% (K)
Rated voltage range/ 額定電壓範圍	100 ~ 630VDC
Temperature range/ 溫度範圍	-55 ~ +125°C
Dielectric strength/ 介電強度	250%
Dissipation factor (Tan δ) / 損失角	50 $\times 10^{-4}$ or 0.5% max, at 120Hz, 25°C
Insulation resistance / 絕緣阻抗	$\geq 9000M\Omega$ when $C_N \leq 0.33\mu F$, 25°C, 100V, 60s
Insulation resistance/ 絕緣阻抗	$\geq 3000M\Omega$ when $C_N > 0.33\mu F$, 25°C, 100V, 60s
Leading/ 引線方式	CP wires for standard/ copper wires for optional

Drawing MEA-type (round)



MEF-type (flat)



Dimension (Unit: mm)

Dimension of MEA as below table

(OD x L x d mm)

Capacitance (μ F)	100V	250V	400V	630V
0.01	5.5 x 14 x 0.6	5.5 x 14 x 0.6	5.5 x 14 x 0.6	5.5 x 14 x 0.6
0.015	5.5 x 14 x 0.6	5.5 x 14 x 0.6	5.5 x 14 x 0.6	5.5 x 14 x 0.6
0.022	5.5 x 14 x 0.6	5.5 x 14 x 0.6	5.5 x 14 x 0.6	6.5 x 14 x 0.6
0.033	5.5 x 14 x 0.6	5.5 x 14 x 0.6	5.5 x 14 x 0.6	6.5 x 14 x 0.6
0.047	6.5 x 14 x 0.6	6.5 x 14 x 0.6	6 x 19 x 0.6	7.5 x 19 x 0.6
0.068	6.5 x 14 x 0.6	6.5 x 14 x 0.6	6.5 x 19 x 0.6	8.5 x 19 x 0.8
0.1	6.5 x 14 x 0.6	6.5 x 14 x 0.6	7.5 x 19 x 0.6	10 x 19 x 0.8
0.15	6.5 x 14 x 0.6	6.5 x 14 x 0.6	8.5 x 19 x 0.8	10 x 25 x 0.8
0.22	6.5 x 14 x 0.6	6.5 x 14 x 0.6	9.5 x 19 x 0.8	11.5 x 25 x 0.8
0.33	8 x 14 x 0.6	7.5 x 19 x 0.6	11.5 x 19 x 0.8	14 x 25 x 0.8
0.47	7 x 19 x 0.6	8.5 x 19 x 0.6	11 x 25 x 0.8	14 x 31 x 0.8
0.68	7.5 x 19 x 0.6	10 x 19 x 0.8	13 x 25 x 0.8	17 x 31 x 0.8
1	9 x 19 x 0.8	10 x 24 x 0.8	14 x 31 x 0.8	19 x 31 x 0.8
1.5	10 x 19 x 0.8	12 x 24 x 0.8	18 x 31 x 0.8	23.5 x 31 x 1.0
2.2	11 x 24 x 0.8	12 x 31 x 0.8	18 x 36 x 0.8	23.5 x 40 x 1.0
3.3	14 x 24 x 0.8	14.5 x 31 x 0.8	21 x 36 x 1.0	27 x 46 x 1.0
4.7	13.5 x 31 x 0.8	17.5 x 31 x 0.8	22 x 40 x 1.0	33 x 46 x 1.0
6.8	16 x 31 x 0.8	16 x 46 x 0.8	22.5 x 57 x 1.0	33.5 x 56 x 1.0

Dimension of MEF as below table

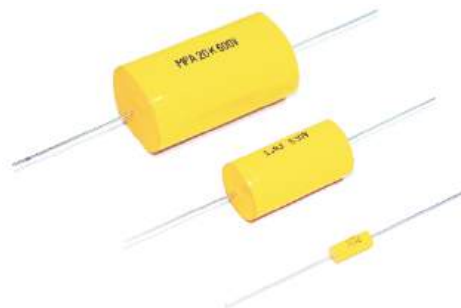
(T x H x L x d mm)

Capacitance (μ F)	100V	250V	400V	630V
0.01	5 x 8 x 14 x 0.6	5 x 8 x 14 x 0.6	5 x 8 x 14 x 0.6	5 x 8 x 14 x 0.6
0.015	5 x 8.5 x 14 x 0.6	5 x 8.5 x 14 x 0.6	5 x 8.5 x 14 x 0.6	5 x 8.5 x 14 x 0.6
0.022	5 x 8.5 x 14 x 0.6	5 x 8.5 x 14 x 0.6	5 x 8.5 x 14 x 0.6	5 x 8.5 x 14 x 0.6
0.033	5 x 8.5 x 14 x 0.6	5 x 8.5 x 14 x 0.6	5 x 8.5 x 14 x 0.6	5 x 9 x 19 x 0.6
0.047	5 x 8.5 x 14 x 0.6	5 x 8.5 x 14 x 0.6	5 x 8.5 x 14 x 0.6	5 x 9 x 19 x 0.6
0.068	5 x 8.5 x 14 x 0.6	5 x 8.5 x 14 x 0.6	5 x 8.5 x 19 x 0.6	6 x 11 x 19 x 0.6
0.1	5 x 8.5 x 14 x 0.6	5 x 8.5 x 14 x 0.6	5 x 8.5 x 19 x 0.6	7 x 12 x 19 x 0.6
0.15	5 x 8.5 x 14 x 0.6	5 x 9 x 19 x 0.6	6 x 11.5 x 19 x 0.6	7.5 x 13 x 19 x 0.6
0.22	5 x 8.5 x 14 x 0.6	5 x 9 x 19 x 0.6	6.5 x 12 x 19 x 0.6	7.5 x 13.5 x 25 x 0.6
0.33	5 x 9 x 14 x 0.6	5 x 9 x 19 x 0.6	9 x 14 x 19 x 0.8	10 x 17 x 25 x 0.8
0.47	5 x 7.5 x 19 x 0.6	6 x 10 x 19 x 0.6	7.5 x 14 x 25 x 0.6	10 x 16.5 x 31 x 0.8
0.68	5 x 9 x 19 x 0.6	7.5 x 11 x 19 x 0.6	10 x 15 x 25 x 0.8	12 x 18 x 31 x 0.8
1	7 x 11 x 19 x 0.6	7 x 12 x 25 x 0.6	10 x 17 x 31 x 0.8	15 x 21.5 x 31 x 0.8
1.5	8 x 12 x 25 x 0.8	8 x 15 x 31 x 0.8	13 x 19.5 x 36 x 0.8	18 x 26 x 40 x 0.8
2.2	8 x 12 x 25 x 0.8	8 x 15 x 31 x 0.8	13.5 x 20 x 36 x 0.8	20 x 28 x 40 x 1.0
3.3	9.5 x 16 x 25 x 0.8	11 x 17.5 x 31 x 0.8	18 x 24 x 36 x 0.8	25 x 31 x 46 x 1.0
4.7	9 x 15.5 x 31 x 0.8	13.5 x 20.5 x 31 x 0.8	18 x 24 x 40 x 0.8	29 x 37 x 46 x 1.0
6.8	11 x 18.5 x 31 x 0.8	13 x 19.5 x 46 x 0.8	17.5 x 24.5 x 57 x 0.8	30 x 37.5 x 56 x 1.0

Please contact with us for complete specification and special design for customized 請與我們聯繫取的更多完整規格與客製品

P01M series/MPA type, MPF type

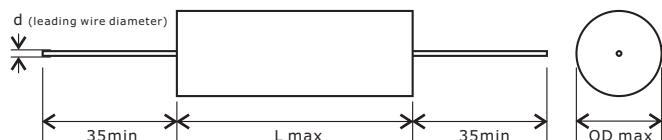
- Made of metallized polypropylene film
- Non-inductive
- High voltage/ frequency
- Stability and reliability
- For general audio and AC/DC application



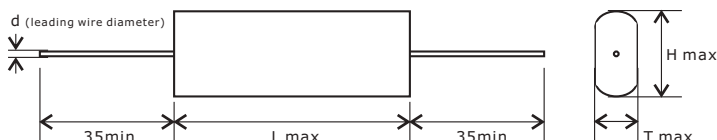
Specifications

Standard/ 適用標準	JIS C5110
Capacitance range/ 電容量範圍	0.01 ~ 68μF
Capacitance tolerance/ 容量誤差	±5% (J), ±10% (K)
Rated voltage range/ 額定電壓範圍	100 ~ 1KVDC (70 ~ 600VAC)
Temperature range/ 溫度範圍	-55 ~ +105°C
Dielectric strength/ 介電強度	150%
Dissipation factor (Tanδ%) / 損失角	65×10 ⁻⁵ or 0.065% max, at 120Hz, 25°C
Insulation resistance / 絕緣阻抗	≥9000MΩ when C _N ≤0.33μF, 25°C, 100V, 60s
Insulation resistance/ 絕緣阻抗	≥3000MΩ when C _N >0.33μF, 25°C, 100V, 60s
Leading/ 引線方式	CP wires for standard/ copper wires for optional

Drawing MPA-type (round)



MPF-type (flat)



Dimension (Unit: mm)

Dimension of MPA as below table

(OD x L x d mm)

Capacitance (μF)	100V	250V	400V	630V
0.01	5 x 14 x 0.6	5 x 14 x 0.6	5 x 14 x 0.6	6 x 14 x 0.6
0.015	6 x 14 x 0.6	6 x 14 x 0.6	6 x 14 x 0.6	7 x 14 x 0.6
0.022	7 x 14 x 0.6	7 x 14 x 0.6	7 x 14 x 0.6	8 x 14 x 0.8
0.033	7 x 14 x 0.6	7 x 14 x 0.6	7 x 14 x 0.6	9 x 14 x 0.8
0.047	7 x 14 x 0.6	7 x 14 x 0.6	7 x 14 x 0.6	10.5 x 14 x 0.8
0.068	7.5 x 14 x 0.6	7.5 x 14 x 0.6	10.5 x 14 x 0.8	9.5 x 19 x 0.8
0.1	6 x 19 x 0.6	6 x 19 x 0.6	8 x 19 x 0.8	10 x 25 x 0.8
0.15	6.5 x 19 x 0.6	7 x 19 x 0.6	9 x 19 x 0.8	12 x 25 x 0.8
0.22	6.5 x 19 x 0.6	7.5 x 19 x 0.6	9.5 x 25 x 0.8	13 x 25 x 0.8
0.33	7 x 19 x 0.6	9 x 19 x 0.8	11 x 25 x 0.8	16 x 25 x 0.8
0.47	8.5 x 19 x 0.8	9 x 25 x 0.8	13 x 25 x 0.8	19 x 25 x 0.8
0.68	9.5 x 19 x 0.8	10 x 25 x 0.8	15 x 25 x 0.8	19 x 36 x 0.8
1	9.5 x 25 x 0.8	10.5 x 31 x 0.8	16 x 31 x 0.8	19.5 x 40 x 0.8
1.5	10.5 x 25 x 0.8	12.5 x 31 x 0.8	19 x 31 x 0.8	22 x 40 x 1.0
2.2	11.5 x 31 x 0.8	15 x 31 x 0.8	20 x 36 x 1.0	23 x 56 x 1.0
3.3	13 x 31 x 0.8	17 x 31 x 0.8	21 x 46 x 1.0	28 x 56 x 1.0
4.7	16 x 31 x 0.8	20 x 31 x 1.0	25 x 46 x 1.0	33.5 x 56 x 1.0
6.8	19.5 x 31 x 0.8	23 x 31 x 1.0	30 x 46 x 1.0	40 x 56 x 1.0

Dimension of MPF as below table

(T x H x L x d mm)

Capacitance (μF)	100V	250V	400V	630V
0.1	5 x 8 x 14 x 0.6	5 x 8 x 14 x 0.6	7 x 10.5 x 19 x 0.6	6.5 x 13 x 25 x 0.6
0.15	6 x 8.5 x 14 x 0.6	6 x 9 x 14 x 0.6	7.5 x 11 x 19 x 0.6	8.5 x 15.5 x 25 x 0.8
0.22	6.5 x 9.5 x 14 x 0.6	6 x 9 x 19 x 0.6	6.5 x 12.5 x 25 x 0.6	10 x 17 x 25 x 0.8
0.33	8.5 x 13 x 14 x 0.8	8.5 x 13 x 19 x 0.8	8.5 x 14 x 25 x 0.8	12.5 x 19 x 25 x 0.8
0.47	6 x 9.5 x 19 x 0.6	6.5 x 10.5 x 25 x 0.6	10 x 16.5 x 25 x 0.8	15 x 21 x 25 x 0.8
0.68	8 x 12 x 19 x 0.8	8 x 12 x 25 x 0.8	9.5 x 16 x 31 x 0.8	15 x 23 x 36 x 0.8
1	7 x 11.5 x 25 x 0.6	8.5 x 12.5 x 31 x 0.8	13 x 18 x 31 x 0.8	17 x 23 x 40 x 0.8
1.5	9 x 13.5 x 25 x 0.8	9.5 x 16 x 31 x 0.8	14.5 x 21 x 31 x 0.8	17.5 x 25.5 x 56 x 0.8
2.2	9.5 x 13 x 31 x 0.8	11 x 17.5 x 31 x 0.8	14.5 x 21 x 46 x 0.8	19.5 x 27.5 x 56 x 0.8
3.3	10.5 x 17 x 31 x 0.8	13.5 x 19.5 x 31 x 0.8	18 x 25 x 46 x 0.8	25 x 33 x 56 x 1.0
4.7	13 x 19 x 31 x 0.8	16.5 x 22.5 x 31 x 0.8	22 x 29 x 46 x 1.0	29.5 x 37 x 56 x 1.0
5.6	14.5 x 20.5 x 31 x 0.8	16 x 23 x 36 x 0.8	24 x 32 x 46 x 1.0	33 x 40.5 x 56 x 1.0
6.8	12 x 18 x 46 x 0.8	15.5 x 22 x 46 x 0.8	26 x 34 x 46 x 1.0	36 x 44 x 56 x 1.0
8.2	13 x 19 x 46 x 0.8	16.5 x 23.5 x 46 x 0.8	29 x 37 x 46 x 1.0	40 x 48 x 56 x 1.0
10	15 x 21 x 46 x 0.8	18.5 x 25 x 46 x 0.8	19 x 37 x 56 x 1.0	40 x 48 x 65 x 1.0

Please contact with us for complete specification and special design for customized 請與我們聯繫取的更多完整規格與客製品

P04D series/DPE type, DPP type

- Self-healing type
- Metallized film made
- Non-inductive
- General AC/ DC application
- Long life and stability

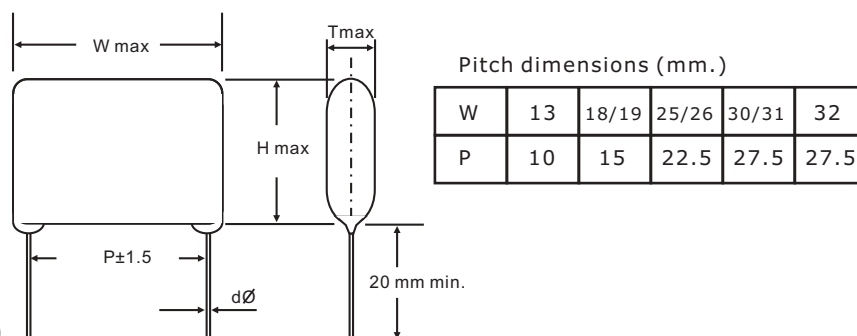


Specifications

DPE: Metallized polyester film/ DPP: Metallized polypropylene film

Standard/ 適用標準	JIS C5110
Capacitance range/ 電容量範圍	0.01 ~ 15 μ F
Capacitance tolerance/ 容量誤差	$\pm 5\%$ (J), $\pm 10\%$ (K)
Rated voltage range/ 額定電壓範圍	100 ~ 630VDC (70 ~ 250VAC)
Temperature range/ 溫度範圍	-55 ~ +105°C
Dielectric strength/ 介電強度	150%
DPE-type Dissipation factor (Tan δ %)/ 損失角	50 $\times 10^{-4}$ or 0.5% max, at 120Hz, 25°C
DPP-type Dissipation factor (Tan δ %)/ 損失角	65 $\times 10^{-5}$ or 0.065% max, at 120Hz, 25°C
Insulation resistance / 絕緣阻抗	$\geq 9000M\Omega$ when $C_N \leq 0.33\mu F$, 25°C, 100V, 60s
Insulation resistance/ 絕緣阻抗	$\geq 3000M\Omega$ when $C_N > 0.33\mu F$, 25°C, 100V, 60s
Leading/ 引線方式	CP wires for standard/ copper wires for optional

Drawing



Dimension (Unit: mm)

Dimension of DPE as below table

(T x H x W x d mm)

Capacitance (μ F)	100V	250V	400V	630V
0.01				5.5 x 10 x 13 x 0.6
0.015			5.5 x 8.5 x 13 x 0.6	6 x 10.5 x 13 x 0.6
0.022			7 x 10 x 13 x 0.6	5.5 x 10.5 x 19 x 0.8
0.033		5.5 x 8.5 x 13 x 0.6	7.5 x 13 x 13 x 0.6	6.5 x 12 x 19 x 0.8
0.047		6.5 x 9.5 x 13 x 0.6	6 x 10.5 x 19 x 0.8	7.5 x 13 x 19 x 0.8
0.068		7 x 10 x 13 x 0.6	6.5 x 11.5 x 19 x 0.8	8.5 x 15 x 19 x 0.8
0.1		8.5 x 11.5 x 13 x 0.6	8 x 13 x 19 x 0.8	8 x 16.0 x 25 x 0.8
0.15	5.5 x 9 x 13 x 0.6	6 x 10 x 19 x 0.8	9 x 15.5 x 19 x 0.8	9 x 17.5 x 25 x 0.8
0.22	6 x 11.5 x 13 x 0.6	7 x 10.5 x 19 x 0.8	8.5 x 16.5 x 25 x 0.8	11.5 x 19 x 25 x 0.8
0.33	5.5 x 10.5 x 19 x 0.8	8 x 13.5 x 19 x 0.8	10 x 17.5 x 25 x 0.8	11 x 20 x 31 x 0.8
0.47	7 x 11 x 19 x 0.8	9 x 15.5 x 19 x 0.8	11.5 x 21 x 25 x 0.8	13 x 22 x 31 x 0.8
0.68	7.5 x 13 x 19 x 0.8	8 x 16.5 x 25 x 0.8	12 x 20.5 x 31 x 0.8	15 x 26 x 32 x 0.8
1	9 x 15 x 19 x 0.8	10 x 17.5 x 25 x 0.8	14.5 x 23.5 x 32 x 0.8	18 x 29 x 32 x 0.8
1.5	8.5 x 16.5 x 25 x 0.8	11 x 20.5 x 25 x 0.8	17.5 x 26.5 x 32 x 0.8	
2.2	10.5 x 18 x 25 x 0.8	11.5 x 21 x 31 x 0.8	21 x 29.5 x 32 x 0.8	
3.3	10.5 x 19.5 x 31 x 0.8	14 x 23.5 x 32 x 0.8		
4.7	14 x 21.5 x 31 x 0.8	16 x 27 x 32 x 0.8		
6.8	16 x 23.5 x 32 x 0.8			

Dimension of DPP as below table

(T x H x W x d mm)

Capacitance (μ F)	100V	250V	400V	630V
0.01	6 x 10 x 13 x 0.6	6 x 10 x 13 x 0.6	6 x 10 x 13 x 0.6	6 x 10 x 13 x 0.6
0.015	6 x 10 x 13 x 0.6	6 x 10 x 13 x 0.6	6 x 10 x 13 x 0.6	
0.022	6 x 10 x 13 x 0.6	6 x 10 x 13 x 0.6	6 x 10 x 13 x 0.6	6.5 x 11 x 18 x 0.8
0.033	7 x 10 x 13 x 0.6	7 x 10 x 13 x 0.6	7 x 12 x 13 x 0.6	6.5 x 12 x 18 x 0.8
0.047	7 x 10 x 13 x 0.6	7 x 10 x 13 x 0.6	7.5 x 11 x 18 x 0.8	7.5 x 14 x 18 x 0.8
0.068	7 x 10 x 13 x 0.6	7 x 10 x 13 x 0.6	7.5 x 11.5 x 18 x 0.8	8.5 x 15.5 x 18 x 0.8
0.1	7 x 11 x 13 x 0.6	7 x 11 x 13 x 0.6	7.5 x 12.5 x 18 x 0.8	9 x 15 x 23 x 0.8
0.15	7 x 12 x 18 x 0.8	7 x 12 x 18 x 0.8	8 x 14 x 23 x 0.8	11.5 x 17.5 x 23 x 0.8
0.22	7 x 12 x 18 x 0.8	7 x 12 x 18 x 0.8	9 x 15 x 23 x 0.8	13 x 19 x 23 x 0.8
0.33	9 x 13 x 18 x 0.8	9.5 x 14.5 x 18 x 0.8	10.5 x 17 x 23 x 0.8	14.5 x 21 x 23 x 0.8
0.47	9 x 13.5 x 18 x 0.8	9 x 13.5 x 23 x 0.8	12 x 18 x 23 x 0.8	17.5 x 24 x 23 x 0.8
0.68	10 x 14 x 18 x 0.8	9.5 x 16 x 23 x 0.8	11.5 x 18 x 30 x 0.8	17 x 24.5 x 32 x 0.8
1	9 x 15 x 23 x 0.8	9.5 x 15.5 x 30 x 0.8	15 x 21.5 x 30 x 0.8	18 x 26 x 32 x 0.8
1.5	11 x 17 x 23 x 0.8	12 x 18 x 30 x 0.8		
2.2	11 x 17 x 30 x 0.8	13 x 19.5 x 30 x 0.8		
3.3	12.5 x 19 x 30 x 0.8	16 x 22 x 30 x 0.8		

Please contact with us for complete specification and special design for customized 請與我們聯繫取的更多完整規格與客製品

P04D series/FPA type, FPF type

- PP film and foil complex made
- Non-inductive
- Precise capacitance tolerance
- AC/ DC application for audio
- Low ESR and high current endurance
- Long life and stability



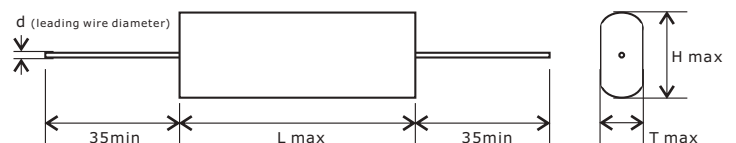
Specifications

Standard/ 適用標準	JIS C5110
Capacitance range/ 電容量範圍	0.01 ~ 15 μ F
Capacitance tolerance/ 容量誤差	$\pm 1\%$ (F), $\pm 2\%$ (G), $\pm 5\%$ (J)/ $\pm 10\%$ (K) standard
Rated voltage range/ 額定電壓範圍	100 ~ 630VDC (70 ~ 300VAC)
Temperature range/ 溫度範圍	-55 ~ +105°C
Dielectric strength/ 介電強度	250%
Dissipation factor (Tan δ) / 損失角	70×10^{-5} or 0.070% max, at 120Hz, 25°C
Insulation resistance / 絕緣阻抗	$\geq 9000M\Omega$ when $C_N \leq 0.33\mu F$, 25°C, 100V, 60s
Insulation resistance/ 絕緣阻抗	$\geq 3000M\Omega$ when $C_N > 0.33\mu F$, 25°C, 100V, 60s
Leading/ 引線方式	Copper wires for standard/ silver for optional

Drawing FPA-type (round)



FPF-type (flat)



Dimension (Unit: mm)

Dimension of FPA as below table

(OD x L x d mm)

Capacitance (μ F)	100V	250V	400V	630V
0.001	5 x 14 x 0.6	5 x 14 x 0.6	6 x 14 x 0.6	5 x 14 x 0.6
0.0022	6 x 14 x 0.6	6 x 14 x 0.6	6 x 14 x 0.6	6 x 14 x 0.6
0.0033	6 x 14 x 0.6	6 x 14 x 0.6	6 x 14 x 0.6	7 x 14 x 0.6
0.0047	6.5 x 14 x 0.6	6.5 x 14 x 0.6	6.5 x 14 x 0.6	7.5 x 14 x 0.6
0.0068	6.5 x 14 x 0.6	7.5 x 14 x 0.6	6.5 x 14 x 0.6	7.5 x 25 x 0.6
0.01	7 x 14 x 0.6	7 x 19 x 0.6	7.5 x 14 x 0.6	8 x 25 x 0.6
0.022	7.5 x 14 x 0.6	7.5 x 19 x 0.6	8.5 x 25 x 0.6	9.5 x 25 x 0.6
0.033	10 x 19 x 0.8	10 x 19 x 0.8	9 x 25 x 0.6	11 x 25 x 0.8
0.047	11 x 19 x 0.8	11 x 19 x 0.8	10 x 25 x 0.8	13 x 25 x 0.8
0.068	12 x 19 x 0.8	12 x 19 x 0.8	12 x 25 x 0.8	14 x 32 x 0.8
0.1	10 x 25 x 0.8	10 x 25 x 0.8	12 x 32 x 0.8	15 x 32 x 0.8
0.22	12 x 25 x 0.8	12.5 x 25 x 0.8	16 x 32 x 0.8	18.5 x 37 x 0.8
0.33	16.5 x 32 x 0.8	17.5 x 32 x 0.8	18 x 37 x 0.8	21 x 37 x 0.8
0.47	19 x 32 x 0.8	20 x 32 x 0.8	22 x 37 x 0.8	25 x 37 x 0.8

Dimension of FPF as below table

(T x H x L x d mm)

Capacitance (μ F)	100V	250V	400V	630V
0.001	5 x 7 x 14 x 0.6	5 x 7 x 14 x 0.6	5 x 7 x 14 x 0.6	5 x 9 x 14 x 0.6
0.0022	5 x 7 x 14 x 0.6	5 x 7 x 14 x 0.6	5.5 x 8 x 14 x 0.6	6 x 9.5 x 14 x 0.6
0.0033	5 x 7 x 14 x 0.6	5 x 7 x 14 x 0.6	6 x 9 x 14 x 0.6	6.5 x 10 x 14 x 0.6
0.0047	5.5 x 7.5 x 14 x 0.6	5.5 x 7.5 x 14 x 0.6	6.5 x 10 x 14 x 0.6	7 x 10.5 x 14 x 0.6
0.0068	5.5 x 7.5 x 14 x 0.6	5.5 x 7.5 x 14 x 0.6	7 x 11 x 14 x 0.6	8 x 11 x 14 x 0.8
0.01	6 x 8.5 x 14 x 0.6	6 x 8.5 x 14 x 0.6	7.5 x 12 x 14 x 0.6	7 x 11 x 19 x 0.6
0.022	5 x 8 x 19 x 0.6	5 x 9 x 19 x 0.6	5 x 11 x 25 x 0.6	6 x 12 x 25 x 0.6
0.033	8 x 11 x 19 x 0.8	8 x 11 x 19 x 0.8	6 x 12 x 25 x 0.6	7 x 14 x 25 x 0.6
0.047	8.5 x 11.5 x 19 x 0.8	8.5 x 12 x 19 x 0.8	6.5 x 13 x 25 x 0.6	8 x 16 x 25 x 0.8
0.068	9.5 x 12.5 x 19 x 0.8	9 x 13 x 19 x 0.8	7.5 x 15 x 25 x 0.6	7 x 15 x 32 x 0.8
0.1	6 x 11 x 25 x 0.6	6.5 x 12 x 25 x 0.6	7 x 14 x 32 x 0.6	8.5 x 16.5 x 32 x 0.8
0.22	8 x 17.5 x 25 x 0.8	8.5 x 18 x 25 x 0.8	13 x 19.5 x 32 x 0.8	15 x 20 x 37 x 0.8
0.33	12 x 19 x 32 x 0.8	13 x 20 x 32 x 0.8	9 x 17 x 37 x 0.8	16 x 22 x 37 x 0.8
0.47	14 x 21 x 32 x 0.8	15 x 22 x 32 x 0.8	15 x 26 x 37 x 0.8	20 x 27 x 37 x 0.8

Please contact with us for complete specification and special design for customized 請與我們聯繫取的更多完整規格與客製品

Electrolytic series/

ECR type, ESI type

- Made of electrolytes and aluminum foils
- Long operation life and reliability
- Low dissipation factor and impedance
- Standard series for general purpose for pc board plug in
- Endurance with ripple current: 2,000hrs/ 3000hrs/ 5000hrs at 85/ 105°C for optional.

Application: ECR and ESI are widely used in electronic ballast, power supply, UPS and inverter.

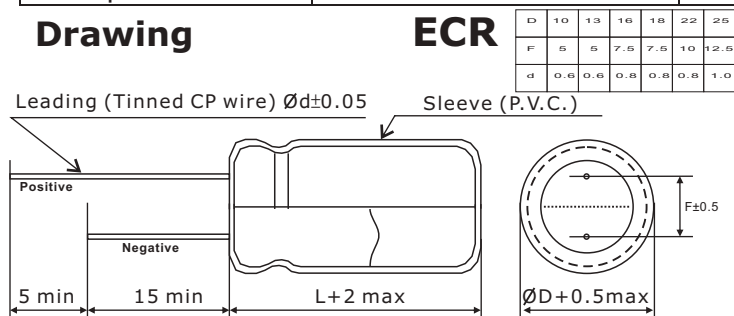
Capacitance tolerance is available to customer requested. 低阻抗型電解電容器，低損失、低阻抗、長壽命、高穩定性，適用於高品質電子電源以及電源濾波、電源供應器、電子鎮流器、電子節能燈等用途。

Specifications

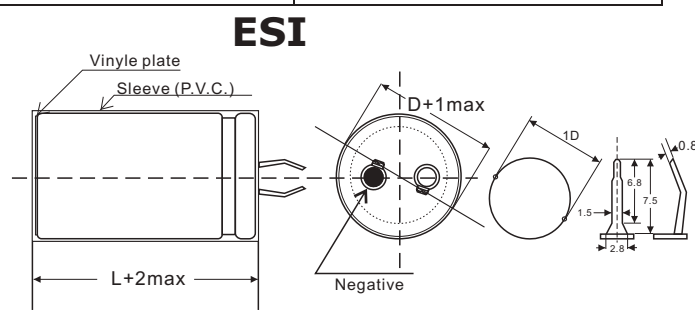
Capacitance range	100 ~ 15000μF/ 25V ~ 100V												
Voltage range	2.2 ~ 2200μF/ 160V ~ 450V (500V for customization)												
Capacitance tolerance	+20-20% (M) for standard/ ±10% (K) for customized.												
Temperature range	-40 ~ +85℃/ -40 ~ +105℃ optional												
Leakage current	I≤0.01CV or 3μA Whichever is greater (at 20℃, after 2 minutes.) I= Leakage current(μA), C= Rated capacitance(μF), V= Rated voltage(V)												
Dissipation factor (Tanδ%)	When the capacitance exceeds 1000μF, 0.02 shall be added every 1000uF increase at 20℃												
	ECR	Rated V	25	35	50	63	100	160	200	250	350	400	450
		Tanδ%	0.15	0.12	0.10	0.10	0.10	0.20	0.20	0.20	0.20	0.25	0.25
	ESI	Rated V	63	100	160	200	250	350	400	450			
		Tanδ%	0.20	0.15	0.15	0.15	0.15	0.15	0.15	0.15			
Low temperature characteristics	ECR	Rated V	25	35	50	63	100	160	200	250	350	400	450
		-25℃/25℃	2	2	2	2	2	8	8	8	12	12	12
		-40℃/25℃	4	4	3	3	3	8	8	8	12	12	12
	ESI	Rated V	63	100	160	200	250	350	400	450			
		-25℃/25℃	2	2	4	4	4	4	4	8			
		-40℃/25℃	6	5	4	8	10	16	18	20			
Load life	The following specification shall be satisfied when the capacitors are restored to 20℃ after the rated voltage with the rated ripple current is applied for 2000 hrs at 105℃ Capacitance change ≤ ±20% of the initial measured value DF (Tanδ%) ≤ ±200% of the initial specified value Leakage current ≤ The initial specified value												
Shelf life	The following specification shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1000 hrs at 105℃ without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes., at least 24 hrs and not more than 48hrs before the measurement Capacitance change ≤ ±20% of the initial measured value DF (Tanδ%) ≤ ±200% of the initial specified value Leakage current ≤ The initial specified value												
Ripple current & Frequency multipliers	Freq.		60(50)Hz		120Hz		500Hz		1KHz		10KHz up		
	Cap.		Under 100μF		0.45		0.55		0.75		0.9		
			100 to 1000μF		0.65		0.75		0.9		0.98		
			1000μF up		0.75		0.8		0.95		1.00		
Ripple current & Temperature multipliers	Temperature (℃)				85				105				
	Multiplier				1.7				1.00				

Drawing

ECR

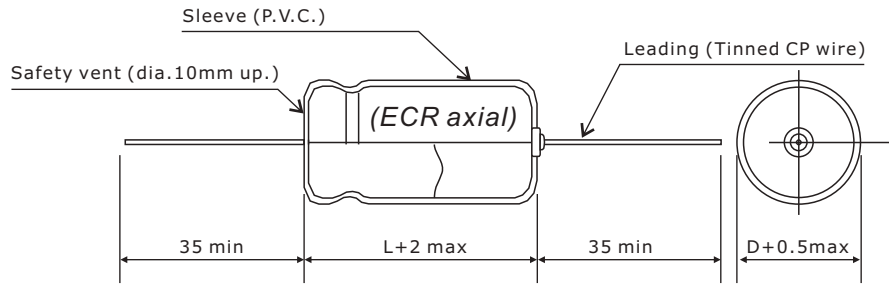


ESI



ECR (axial leads) for customized to audio or other electronics are available as below drawing:

We can provide 500VDC max for high end audio application. Please provide us the rated voltage, capacitance, ripple current, dimension and other details as requested. We will follow your demanding to produce what the capacitor you need.



ECR Dimension (Unit: mm)

VDC	25		35		50		63		100		160		200		250		350		400		450	
uF	DxL	mA	DxL	mA	DxL	mA	DxL	mA	DxL	mA	DxL	mA	DxL	mA	DxL	mA	DxL	mA	DxL	mA	DxL	mA
2.2																	10x12	20	10x12	20	10x12	22
3.3																	10x12	30	10x15	30	10x15	35
4.7																	10x12	40	10x15	35	10x20	40
10											10x12	50	10x12	55	10x16	60	10x20	55	10x20	60	13x21	60
22											10x16	85	10x20	100	10x20	110	13x21	100	13x26	100	16x26	110
33											10x12.5	110	10x20	115	10x20	125	13x21	135	16x26	130	16x26	140
47											10x12	140	13x21	145	13x21	165	13x21	175	16x26	175	16x33	200
100											10x12	140	13x21	145	13x21	165	13x21	175	16x26	175	16x33	200
220											10x15	135	10x17	145	10x20	240	16x26	245	16x26	250	16x32	275
330											10x17	340	13x21	345	13x26	450	16x36	450	22x27	500	22x38	560
470											10x17	350	13x21	400	13x26	450	16x26	550	22x38	570	22x38	600
1000											10x21	400	13x21	480	13x26	530	16x33	700	22x38	700	25x41	750
2200											10x21	400	13x21	480	13x26	530	16x33	700	22x38	700	25x41	750
3300											10x21	400	13x21	480	13x26	530	16x33	700	22x38	700	25x41	750
4700											10x21	400	13x21	480	13x26	530	16x33	700	22x38	700	25x41	750
6800											10x21	400	13x21	480	13x26	530	16x33	700	22x38	700	25x41	750
10000											10x21	400	13x21	480	13x26	530	16x33	700	22x38	700	25x41	750
15000											10x21	400	13x21	480	13x26	530	16x33	700	22x38	700	25x41	750

Snap-In Dimension (Unit: mm)

VDC	50		63		100		160		200		250		350		400		450	
uF	DxL	A	DxL	A	DxL	A	DxL	A	DxL	A	DxL	A	DxL	A	DxL	A	DxL	A
47															22x27	0.15	22x30	0.15
68															22x27	0.2	22x36	0.2
100															22x30	0.3	22x35	0.3
150															22x40	0.4	22x40	0.4
220															22x30	0.45	25x40	0.5
330															22x30	0.8	22x40	0.8
470															22x30	1	22x40	1
680															22x30	1.1	22x40	1.1
1000															22x30	1.2	22x40	1.2
1500															22x30	1.4	22x40	1.4
2200															22x30	1.6	22x40	1.6
3300															22x30	1.8	22x40	1.8
4700															22x30	2	22x40	2
6800															22x30	2.2	22x40	2.2
10000															22x30	2.4	22x40	2.4
15000															22x30	2.6	22x40	2.6

Above dimensions are according to our standard design and might be altered without notice.

Contact with us for details and dimensions further. (請來電聯繫客製品或更多詳細規格與完整尺寸表)

Customized Film Capacitor

客製化電容器

台灣製造

- Self-healing type
- Very low dissipation factor
- Flame retardant end seal
- High stability and reliability
- Oil filled or dry type optional without P'CB
- Operation life of 60,000hrs or 100,000hrs (Ur vdc) for optional

Application: Power factor correction for power supply, UPS and transducer, rectifier, GTO, IGBT snubber, pulsed, DC-Link and AC filter, damping, commutating. 客製化電容器可承製規格如下表所示，適用於功率因素補償、電源濾波、支撐電容、儲能、高壓或大電流迴路中的濾波與耦合，具高穩定性，長壽命。

Specifications

Standard reference/ 參考標準	JIS4908, UL810, IEC61071
Capacitance range/ 電容量範圍	0.0001 ~ 1500 μ F
Capacitance tolerance/ 容量誤差	+10-5% (U), $\pm$ 1% (F), $\pm$ 2% (G), $\pm$ 5% (J) optional $\pm$ 10% (K) for standard
Rated voltage range/ 可承製電壓範圍	100 ~ 3600VDC 180 ~ 1000VAC at 50/60Hz
Temperature range/ 溫度範圍	$\geq$ 501 μ F : -40 ~ +70 $^{\circ}$ C (-40/70/56) $\leq$ 500 μ F : -40 ~ +85 $^{\circ}$ C (-40/85/56)
Tan δ % / 損失角	50 $\times$ 10 ⁻⁵ or 0.050% max, 25 $^{\circ}$ C when C _N $\leq$ 10 μ F 80 $\times$ 10 ⁻⁵ or 0.080% max, 25 $^{\circ}$ C when C _N $\geq$ 10 μ F
Withstand between terminals/ 端子間耐壓	Rated voltage $\times$ 175% for 60 sec
Withstand terminal to case/ 端子外殼間耐壓	2600VAC or 3800VAC for 60 sec optional
Safety requirement/ 安全保護	Explosion-proof is available for optional
Leading/ 引腳方式	Copper wires, plates or screws for optional



Please provide us the U_N voltage, Urms voltage, peak voltage and rated voltage, capacitance, tolerance, climatic category requirement, application, use, leading and maximum dimension. We will follow your demanding specification to offer you what the capacitor you require. (本公司客製化電容器並無標準尺寸與規格表，有需求者請來電或者 email 聯繫告知您的規格需求，包括：電壓頻率、工作電壓、峰值電壓、電容值、氣候類別、應用領域、使用環境，引腳方式和尺寸限制，我們將依照您的需求提供報價，特殊應用電容器，數量小於 10 顆亦可接單生產製作)