

- High Temperature Range(135°C).
- 高溫度範圍 (135°C)

■ SPECIFICATIONS 規格表

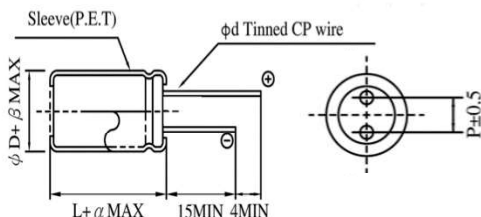
Item	Performance Characteristics 特性									
Operating Temperature Range 工作溫度範圍	-55 ~ +135°C									
Voltage Range 額定電壓範圍	10 ~ 100V									
Capacitance Tolerance 靜電容量容許差	±20% at 120Hz,20°C									
Leakage Current 漏電流	After 1 minute application of rated voltage, leakage current is lower than 0.03CV or 4(μA), whichever is greater. I = 0.03CV或4 (μA) 以下(1分鐘) I = Leakage Current (漏電流) C = Capacitance (靜電容量) V = Rated Voltage (額定電壓)									
Tangent of loss angle 損失角正切值	For capacitance of more than 1000 μF, add 0.02 for every increase of 1000 μF 對於超過1000 μF產品，每增加1000 μF，其值增加0.02									
	Rated voltage (V) 額定電壓	10	16	25	35	50	63	80	100	
	Tanδ (MAX)	0.20	0.16	0.14	0.12	0.10	0.10	0.08	0.08	
	(Frequency : 120Hz, Temperature : 20°C)									
Stability at Low Temperature 溫度特性	Rated voltage (V)		10	16	25	35	50	63	80	100
	Impedance Ratio 阻抗比	Z-25°C/Z+20°C	3	2	2	2	2	2	2	2
		ZT/Z 20 (MAX)	Z-40°C/Z+20°C	4	4	4	4	4	4	4
	(Frequency:120Hz)									
Endurance 耐久性	After applying rated voltage with rated ripple current for specified time at 135°C, the capacitors shall meet the following requirements. 在135°C環境中，不超過額定電壓的範圍內疊加額定紋波電流，連續加載表內時間後，符合下列要求									
	Case size 鋁殼尺寸	Life time (hrs)	Capacitance Change 靜電容量變化率				Within ±25% of initial Value 初期值的±25%以內			
	φD=8	1000	Tangent of loss angle (Tanδ) 損失角正切值				Not exceeding 200% of initial specified value 規格值200%以下			
	φD=10	2000	Leakage current 漏電流				Not exceeding of initial specified value 規格值以下			
	φD≥12.5	3000								
Shelf Life 高溫無負荷	After storing the capacitors under no load at 135 °C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20 °C, they shall meet the specified values for the endurance characteristics listed above. 在135°C下無負荷放置1000小時後，在20 °C下依據JIS C 5101-4 4.1項進行電壓處理後，將滿足以上耐久性的特性值									

■ Frequency Coefficient of Allowable Ripple Current 容許紋波電流的頻率係數

Frequency Cap(μF)	120Hz	300Hz	1KHz	10KHz ~
CV<1000	0.50	0.64	0.83	1.00
CV≥1000	0.67	0.79	0.91	1.00

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■ RADIAL LEAD TYPE 尺寸圖



ΦD	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Φd	0.5	0.5	0.6	0.6	※0.6	0.8	0.8
β	0.5	0.5	0.5	0.5	0.5	0.5	0.5
α	L < 20 : 1.5						
	L ≥ 20 : 2.0						

※In case L ≥ 35 for the φ12.5 dia. unit, lead dia. φd = 0.8mm

■ DIMENSIONS 尺寸

Rated Ripple Current(mA r.m.s. at 135°C,100KHz)

W.V	10V			16V		
S.V	13V			20V		
Item Cap(μF)	Size D x L(mm)	Ripple	Impedance(ΩMAX) 20°C/100KHz	Size D x L(mm)	Ripple	Impedance(ΩMAX) 20°C/100KHz
100				8 x 11.5	340	0.32
220	8 x 11.5	340	0.26	10 x 12.5	620	0.15
330	10 x 12.5	620	0.15	10 x 12.5	680	0.10
470	10 x 12.5	680	0.10	10 x 16	945	0.075
1000	10 x 20	1100	0.057	12.5 x 20	1490	0.042
2200	12.5 x 25	1750	0.033	16 x 25	2300	0.024
3300	16 x 25	2300	0.024	16 x 30.5	2710	0.020
4700	16 x 30.5	2710	0.020	18 x 30.5	3270	0.018

■ DIMENSIONS 尺寸

Rated Ripple Current(mA r.m.s. at 135°C,100KHz)

W.V	25V			35V		
S.V	32V			44V		
Item Cap(μF)	Size D x L(mm)	Ripple	Impedance(ΩMAX) 20°C/100KHz	Size D x L(mm)	Ripple	Impedance(ΩMAX) 20°C/100KHz
100	8 x 11.5	500	0.13	10 x 12.5	620	0.15
220	10 x 12.5	680	0.10	10 x 16	790	0.094
330	10 x 16	945	0.075	10 x 20	950	0.075
470	10 x 20	1100	0.057	12.5 x 20	1330	0.058
1000	12.5 x 25	1750	0.033	16 x 25	2010	0.031
2200	16 x 30.5	2710	0.020			

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■ DIMENSIONS 尺寸

Rated Ripple Current(mA r.m.s. at 135°C,100KHz)

W.V		50V			63V		
S.V		63V			79V		
Cap(μF)	Item	Size D x L(mm)	Ripple	Impedance(ΩMAX) 20°C/100KHz	Size D x L(mm)	Ripple	Impedance(ΩMAX) 20°C/100KHz
1		8 x 11.5	35	2.00			
2.2		8 x 11.5	50	1.80			
3.3		8 x 11.5	60	1.50			
4.7		8 x 11.5	85	1.15			
10		8 x 11.5	180	0.75			
22		8 x 11.5	250	0.50	8 x 11.5	130	2.00
33		8 x 11.5	300	0.45	8 x 11.5	150	1.50
47		8 x 11.5	440	0.35	10 x 12.5	530	0.59
100		10 x 12.5	555	0.18	10 x 16	690	0.41
220		10 x 20	930	0.098	12.5 x 20	1050	0.16
330		12.5 x 20	1330	0.070	12.5 x 25	1290	0.12
470		12.5 x 25	1650	0.055	12.5 x 30.5	1460	0.097
					16 x 25	1500	0.11
1000		16 x 30.5	2430	0.031	16 x 30.5	1900	0.055

■ DIMENSIONS 尺寸

Rated Ripple Current(mA r.m.s. at 135°C,100KHz)

W.V		80V			100V		
S.V		100V			125V		
Cap(μF)	Item	Size D x L(mm)	Ripple	Impedance(ΩMAX) 20°C/100KHz	Size D x L(mm)	Ripple	Impedance(ΩMAX) 20°C/100KHz
4.7					8 x 11.5	130	2.00
10					8 x 11.5	150	1.50
22		8 x 11.5	150	1.50	10 x 12.5	480	0.80
33		10 x 12.5	480	0.80	10 x 12.5	480	0.80
47		10 x 12.5	480	0.80	10 x 16	630	0.55
100		10 x 20	790	0.39	12.5 x 20	990	0.25
220		12.5 x 25	1240	0.18	16 x 25	1500	0.11
330		12.5 x 30.5	1390	0.16	16 x 30.5	1790	0.079
470		16 x 25	1500	0.11			