

- Miniaturized, Low Impedance.
- 小型化尺寸、低阻抗

SPECIFICATIONS 規格表

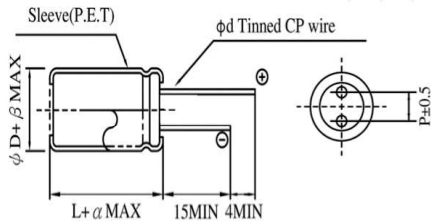
Item	Performance Characteristics 特性									
Operating Temperature Range 工作溫度範圍	-40 ~ +105℃									
Voltage Range 額定電壓範圍	6.3 ~ 100V									
Capacitance Tolerance 靜電容量容許差	±20% at 120Hz,20℃									
Leakage Current 漏電流	After 2 minutes application of rated voltage, leakage current is lower than 0.01CV or 3(μA), whichever is greater. I = 0.01CV或3 (μA) 以下 (2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	6.3	10	16	25	35	50	63	100	
	Tanδ (MAX)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	
(Frequency : 120Hz , Temperature : 20℃)										
Stability at Low Temperature 溫度特性	Rated voltage (V)		6.3	10	16	25	35	50	63	100
	Impedance Ratio 阻抗比	Z-25℃/Z+20℃	2	2	2	2	2	2	2	2
	ZT/Z 20 (MAX)	Z-40℃/Z+20℃	3	3	3	3	3	3	3	3
(Frequency:120Hz)										
Endurance 耐久性	After applying rated voltage with rated ripple current for specified time at 105℃, the capacitors shall meet the following requirements. 在105℃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 時間(hrs)	Capacitance Change 靜電容量變化率			Within ±25% of initial Value 初期值的±25%以內				
	φD≤8	2000	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	3000	Leakage current 漏電流			Not exceeding of initial specified value 規格值以下				
Shelf Life 高溫無負荷	After storing the capacitors under no load at 105 °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105℃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

V	Frequency	50Hz	120Hz	300Hz	1KHz	100KHz ~
	Cap(μF)					
6.3~100	6.8~47	0.20	0.30	0.50	0.80	1.00
	68~330	0.55	0.65	0.75	0.85	1.00
	390~1000	0.70	0.75	0.80	0.90	1.00
	1200~18000	0.80	0.85	0.90	0.95	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 105°C, 100KHz)

W.V S.V	6.3V 8V				10V 13V			
Item Cap(μF)	Size D x L(mm)	Ripple	Impedance(ΩMAX)		Size D x L(mm)	Ripple	Impedance(ΩMAX)	
			20°C/100KHz	-10°C/100KHz			20°C/100KHz	-10°C/100KHz
100					5 x 11	210	0.58	1.21
120	5 x 11	210	0.58	1.21				
150	5 x 11	210	0.58	1.21				
220					6.3 x 11	340	0.22	0.50
330	6.3 x 11	340	0.22	0.50				
470					8 x 11.5	640	0.13	0.29
680	8 x 11.5	640	0.13	0.29	8 x 15	840	0.087	0.19
820	10 x 12.5	865	0.080	0.16	10 x 12.5	865	0.080	0.16
1000	8 x 15	840	0.087	0.19	8 x 20	1050	0.069	0.15
					10 x 16	1210	0.060	0.13
1200	8 x 20	1050	0.069	0.15	10 x 20	1400	0.046	0.10
	10 x 16	1210	0.060	0.13				
1500	10 x 20	1400	0.046	0.10	10 x 25	1650	0.042	0.096
					12.5 x 15	1450	0.049	0.107
1800	12.5 x 15	1450	0.049	0.107				
2200	10 x 25	1650	0.042	0.096	10 x 30.5	1910	0.031	0.074
					12.5 x 20	1900	0.035	0.080
2700	10 x 30.5	1910	0.031	0.074				
3300	12.5 x 20	1900	0.035	0.080	12.5 x 25	2230	0.027	0.056
3900	12.5 x 25	2230	0.027	0.056	12.5 x 30.5	2650	0.024	0.052
					16 x 20	2530	0.027	0.062
4700	12.5 x 30.5	2650	0.024	0.052				
5600	16 x 20	2530	0.027	0.062	16 x 25	2930	0.021	0.048
6800	16 x 25	2930	0.021	0.048	16 x 30.5	3450	0.017	0.035
					18 x 25	3140	0.019	0.043
8200	16 x 30.5	3450	0.017	0.035	16 x 35.5	3610	0.015	0.034
					18 x 30.5	4170	0.015	0.033
10000	16 x 35.5	3610	0.015	0.034	18 x 35.5	4220	0.014	0.032
	18 x 25	3140	0.019	0.043				
12000	18 x 30.5	4170	0.015	0.033	18 x 40	4280	0.012	0.025
15000	18 x 35.5	4220	0.014	0.032				
18000	18 x 40	4280	0.012	0.025				

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■ DIMENSIONS 尺寸

Rated Ripple Current(mA r.m.s. at 105°C,100KHz)

W.V	16V				25V			
S.V	20V				32V			
Item Cap(μF)	Size D x L(mm)	Ripple	Impedance(ΩMAX)		Size D x L(mm)	Ripple	Impedance(ΩMAX)	
			20°C/100KHz	−10°C/100KHz			20°C/100KHz	−10°C/100KHz
47					5 x 11	210	0.58	1.21
56	5 x 11	210	0.58	1.21				
100					6.3 x 11	340	0.22	0.50
150	6.3 x 11	340	0.22	0.50				
220					8 x 11.5	640	0.13	0.29
330	8 x 11.5	640	0.13	0.29	8 x 15	840	0.087	0.19
470					10 x 12.5	865	0.080	0.16
	8 x 15	840	0.087	0.19	8 x 20	1050	0.069	0.15
	10 x 12.5	865	0.080	0.16	10 x 16	1210	0.060	0.13
680	8 x 20	1050	0.069	0.15	10 x 20	1400	0.046	0.10
	10 x 16	1210	0.060	0.13	12.5 x 15	1450	0.049	0.107
820					10 x 25	1650	0.042	0.096
1000	10 x 20	1400	0.046	0.10	10 x 30.5	1910	0.031	0.074
	12.5 x 15	1450	0.049	0.107	12.5 x 20	1900	0.035	0.080
1200	10 x 25	1650	0.042	0.096				
1500	10 x 30.5	1910	0.031	0.074	12.5 x 25	2230	0.027	0.056
	12.5 x 20	1900	0.035	0.080				
1800	12.5 x 25	2230	0.027	0.056	12.5 x 30.5	2650	0.024	0.052
2200	12.5 x 25	2230	0.027	0.056	16 x 20	2530	0.027	0.062
2700	12.5 x 30.5	2650	0.024	0.052	16 x 25	2930	0.021	0.048
	16 x 20	2530	0.027	0.062				
3300					16 x 30.5	3450	0.017	0.035
					18 x 25	3140	0.019	0.043
3900	16 x 25	2930	0.021	0.048	16 x 35.5	3610	0.015	0.034
					18 x 30.5	4170	0.015	0.033
4700	16 x 30.5	3450	0.017	0.035	18 x 35.5	4220	0.014	0.032
	18 x 25	3140	0.019	0.043				
5600	16 x 35.5	3610	0.015	0.034	18 x 40	4280	0.012	0.025
	18 x 30.5	4170	0.015	0.033				
8200	18 x 35.5	4220	0.014	0.032				
10000	18 x 40	4280	0.012	0.025				

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■ DIMENSIONS 尺寸

Rated Ripple Current(mA r.m.s. at 105°C,100KHz)

W.V		35V				50V			
S.V		44V				63V			
Cap(μF)	Item	Size D x L(mm)	Ripple	Impedance(ΩMAX)		Size D x L(mm)	Ripple	Impedance(ΩMAX)	
				20°C/100KHz	-10°C/100KHz			20°C/100KHz	-10°C/100KHz
10						5 x 11	100	1.50	3.30
22						5 x 11	180	0.70	1.54
33		5 x 11	210	0.58	1.21				
56		6.3 x 11	340	0.22	0.50	6.3 x 11	295	0.30	0.63
100						8 x 11.5	555	0.17	0.39
120						8 x 15	730	0.12	0.28
150		8 x 11.5	640	0.13	0.29	10 x 12.5	760	0.12	0.26
180						8 x 20	910	0.091	0.19
220		8 x 15	840	0.087	0.19	10 x 16	1050	0.084	0.19
		10 x 12.5	865	0.080	0.16				
270		8 x 20	1050	0.069	0.15	10 x 20	1220	0.060	0.14
						12.5 x 15	1260	0.061	0.14
330		10 x 16	1210	0.060	0.13	10 x 25	1440	0.055	0.115
470		10 x 20	1400	0.046	0.10	10 x 30.5	1690	0.043	0.094
		12.5 x 15	1450	0.049	0.107	12.5 x 20	1660	0.045	0.099
560		10 x 25	1650	0.042	0.096	12.5 x 25	1950	0.034	0.071
680		10 x 30.5	1910	0.031	0.074	12.5 x 30.5	2310	0.030	0.066
		12.5 x 20	1900	0.035	0.080				
820						16 x 20	2210	0.034	0.081
1000		12.5 x 25	2230	0.027	0.056	16 x 25	2555	0.025	0.057
1200		12.5 x 30.5	2650	0.024	0.052	16 x 30.5	3010	0.022	0.052
		16 x 20	2530	0.027	0.062				
1500						16 x 35.5	3150	0.019	0.047
1800		16 x 25	2930	0.021	0.048	16 x 35.5	3150	0.019	0.047
						18 x 30.5	3635	0.021	0.048
						18 x 35.5	3680	0.017	0.040
2200		16 x 30.5	3450	0.017	0.035	18 x 40	3800	0.014	0.032
		18 x 25	3140	0.019	0.043				
2700		16 x 35.5	3610	0.015	0.034	18 x 40	3800	0.014	0.032
		18 x 30.5	4170	0.015	0.033				
3300		18 x 35.5	4220	0.014	0.032				
3900		18 x 40	4280	0.012	0.025				

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■ DIMENSIONS 尺寸
 Rated Ripple Current(mA r.m.s. at 105°C,100KHz)

W.V		63V				100V			
S.V		79V				125V			
Cap(μF)	Item	Size D x L(mm)	Ripple	Impedance(ΩMAX)		Size D x L(mm)	Ripple	Impedance(ΩMAX)	
				20°C/100KHz	-10°C/100KHz			20°C/100KHz	-10°C/100KHz
6.8						5 x 11	55	2.30	4.83
15		5 x 11	55	2.30	4.83	6.3 x 11	115	1.20	2.76
27						8 x 11.5	232	0.63	1.512
33		6.3 x 11	115	1.20	2.76				
39						8 x 15	300	0.45	1.035
47						10 x 12.5	288	0.43	0.903
56		8 x 11.5	232	0.63	1.512	8 x 20	362	0.33	0.79
68						10 x 16	357	0.31	0.713
82		8 x 15	300	0.45	1.035	10 x 20	466	0.21	0.504
		10 x 12.5	288	0.43	0.903	12.5 x 15	466	0.23	0.575
100						10 x 25	531	0.20	0.46
120		8 x 20	362	0.33	0.79	10 x 30.5	663	0.15	0.36
		10 x 16	357	0.31	0.713	12.5 x 20	690	0.16	0.384
180		10 x 20	466	0.21	0.504	12.5 x 25	784	0.12	0.276
		12.5 x 15	466	0.23	0.575				
220		10 x 25	531	0.20	0.46	12.5 x 30.5	905	0.10	0.24
						16 x 20	1040	0.091	0.191
270		10 x 30.5	663	0.15	0.36	16 x 25	1250	0.073	0.167
		12.5 x 20	690	0.16	0.384				
330		12.5 x 25	784	0.12	0.276				
390						16 x 30.5	1570	0.054	0.113
						18 x 25	1490	0.057	0.125
470		12.5 x 30.5	905	0.10	0.24	16 x 35.5	1790	0.045	0.099
		16 x 20	1040	0.091	0.191	18 x 30.5	1630	0.047	0.103
560		16 x 25	1250	0.073	0.167				
680						18 x 35.5	1790	0.040	0.084
820		16 x 30.5	1570	0.054	0.113	18 x 40	2330	0.036	0.079
		18 x 25	1490	0.057	0.125				
1000		16 x 35.5	1790	0.045	0.099	18 x 40	2330	0.036	0.079
		18 x 30.5	1630	0.047	0.103				
1200		18 x 35.5	1790	0.040	0.084				
1500		18 x 40	2330	0.036	0.079				