

產品特點 Features

Nonpolar, high temperature.  
Suitable for use in polarity and change circuits.  
無極性品。  
適用於極性變換電路。

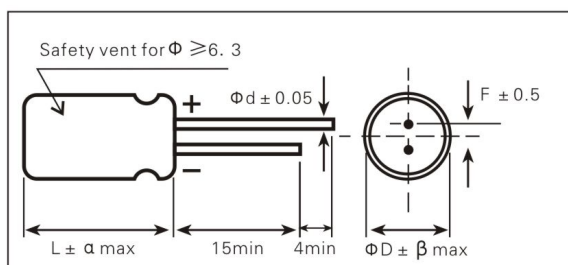


規格書 SPECIFICATION

項目 Item	特性參數 Characteristics								
使用溫度範圍 Operating Temperature Range	-40 to +105℃								
額定電壓範圍 Rated Working Voltage Range	6.3 to 100V								
容量範圍 Nominal Capacitance Range	2.2 to 1000 μ F								
容量允許偏差 Capacitance Tolerance	± 20% at 120Hz, +20℃								
漏電流 Leakage Current	I ≤0.03CV or 3 (μ A) 在常溫加額定電壓5分鐘讀數，兩者取大值 whichever is greater measured after 5 minutes application of rated working voltage at +20℃								
損耗角正切值(20℃, 120Hz) tan δ (120Hz, +20℃)	Working Voltage (V)	6.3	10	16	25	35	50	63	100
	tan δ (max.)	0.26	0.24	0.22	0.20	0.16	0.14	0.12	0.10
低溫特性 Low Temperature Characteristics	Impedance ratio max. at 120Hz								
	Working Voltage (V)	6.3	10	16	25	35	50	63	100
	Z-25℃ / Z+20℃	4	3	2	2	2	2	2	2
	Z-40℃ / Z+20℃	8	6	4	4	3	3	3	3
高溫負荷特性 High Temperature Loading	在105℃加額定電壓與額定紋波電流1000H（每250H產品換方向一次）然後取出恢復常溫後測試 Test time : 1,000 hours Test temperature:+105℃ Test conditions:Rated DC working voltage to each polarity every 250 hours Post test requirements at +20℃								
	Leakage current	≤ Initial specified value							
	Cap. change	within ± 20% of the initial measured value							
	tan δ	≤200% of the initial specified value							
高溫貯存特性 Shelf Life	At +105℃ no voltage applied after 1,000 hours and then being stabilized at +20℃ the capacitors shall meet the following limits								
	Leakage current	≤ Initial specified value							
	Cap. change	within ± 20% of the initial measured value							
	tan δ	≤200% of the initial specified value							
參考國際標準 Industrial Standard	JIS C – 5101-4 (IEC 60384-4)								

外型圖 DIMENSIONS

Unit: mm



Φd	5	6.3	8 (L < 20)	8 (L ≥ 20)	10	13	16
F	2.0	2.5	3.5	3.5	5.0	5.0	7.5
Φd	0.5	0.5	0.5	0.6	0.6	0.6	0.8
α	(L < 20) 1.5 (L ≥ 20) 2.0						
β	(D < 20) 0.5 (D ≥ 20) 1.0						

## 紋波電流修正系數 RIPPLE CURRENT MULTIPLIER

Frequency Coefficient

Frequency coefficient Cap(μF)	50	120	300	1k	10k~
≤47	0.75	1.00	1.35	1.57	2.00
68~220	0.80	1.00	1.23	1.34	1.50
≥560	0.85	1.00	1.10	1.13	1.15

## 一覽表 Standard

Voltage (Code)		6.3V (0J)		10V (1A)		16V (1C)		25V (1E)	
Cap. (μF)	Code	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
4.7	475							5 x 11	23
10	106					5 x 11	30	5 x 11	34
22	226			5 x 11	42	6.3 x 11	51	6.3 x 11	55
33	336	5 x 11	46	6.3 x 11	57	6.3 x 11	63	8 x 12	79
47	476	6.3 x 11	61	6.3 x 11	67	8 x 12	89	10 x 12.5	100
100	107	8 x 12	104	10 x 12.5	125	10 x 12.5	139	10 x 16	164
220	227	10 x 12.5	168	10 x 16	204	10 x 20	279	13 x 25	336
330	337	10 x 16	229	10 x 20	275	13 x 20	346	13 x 25	414
470	477	10 x 20	330	13 x 20	371	13 x 25	460	16 x 25	543
1000	108	13 x 25	550	16 x 25	668	16 x 25	746	16 x 30	871

Maximum Allowable Ripple Current (mA rms) at 105°C 120Hz  
在105°C 120Hz條件下的最大紋波值

Case Size Φ D x L (mm)  
尺寸 Φ D x L (mm)

Voltage (Code)		35V (1V)		50V (1H)		63V (1J)		100V (2A)	
Cap. (μF)	Code	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
2.2	225			5 x 11	18			6.3 x 11	22
3.3	335			5 x 11	22	6.3 x 11	26	8 x 12	32
4.7	475	5 x 11	25	6.3 x 11	29	6.3 x 11	31	8 x 12	39
10	106	6.3 x 11	40	8 x 12	51	8 x 12	53	10 x 12.5	64
22	226	8 x 12	68	10 x 12.5	82	10 x 16	96	10 x 20	114
33	336	10 x 12.5	89	10 x 16	107	10 x 20	129	13 x 20	164
47	476	10 x 12.5	111	10 x 20	146	10 x 20	157	13 x 25	200
100	107	10 x 20	196	13 x 25	264	13 x 25	275	16 x 25	304
220	227	13 x 25	364	16 x 25	443	16 x 30	486		
330	337	16 x 25	493	16 x 30	593				
470	477	16 x 25	586						

Maximum Allowable Ripple Current (mA rms) at 105°C 120Hz  
在105°C 120Hz條件下的最大紋波值

Case Size Φ D x L (mm)  
尺寸 Φ D x L (mm)