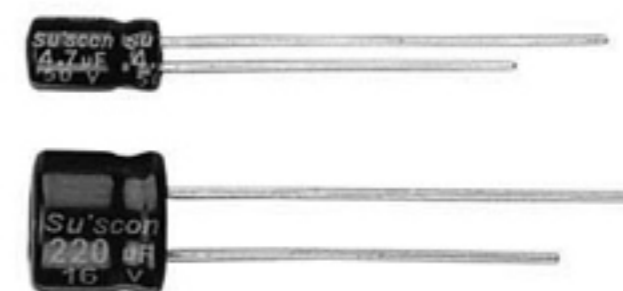


SM series

- Miniature product, 105°C.
- Applicable to small electronic devices.
- Height : 7 mm.
- RoHS Compliance
- 105°C小型化產品。
- 適用於小型電子設備。
- 高度：7mm系列。



SPECIFICATIONS

Items 項目	Characteristics 特性									
Capacitance Tolerance 靜電容量誤差	± 20%(120Hz,20°C)									
Operating Temperature Range 適用溫度範圍	-40 ~ +105°C									
Rated Voltage Range 額定電壓範圍	6.3 ~ 50VDC									
Leakage Current 洩漏電流	$I \leq 0.01CV$ or 3 (µA) which is greater. (After 2 minutes application of DC rated voltage, at 20 °C)									
Dissipation Factor 散逸因素(tan δ)	Measurement Frequency: 120Hz. Temperature: 20°C									
	Rated Voltage(V)	2.7	6.3	10	16	25	35	50	63	100
	tan δ(Max)	0.25	0.24	0.20	0.16	0.15	0.12	0.10	0.09	0.07
Low Temperature Stability 低溫特性 Impedance Ratio(Max) 阻抗比率(最大值)	Measurement Frequency: 120Hz.									
	Rated Voltage(V)	6.3	10	16	25	35	50			
	Z(-25°C)/Z(20°C)	3	2	2	2	2	2			
	Z(-40°C)/Z(20°C)	6	5	4	3	3	3			
Load Life 負荷壽命	1000hours,with application of rated voltage at 105°C									
	Capacitance Change	Within ± 20% of Initial Value								
	tan δ	200% or less of Initial Specified Value								
	Leakage Current	Initial Specified Value or less								
Shelf Life 放置壽命	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.									
	Capacitance Change	Within ± 20% of Initial Value								
	tan δ	200% or less of Initial Specified Value								
	Leakage Current	Initial Specified Value or less								
Standards 參照標準	JIS C 5101-4 (IEC 60384)									

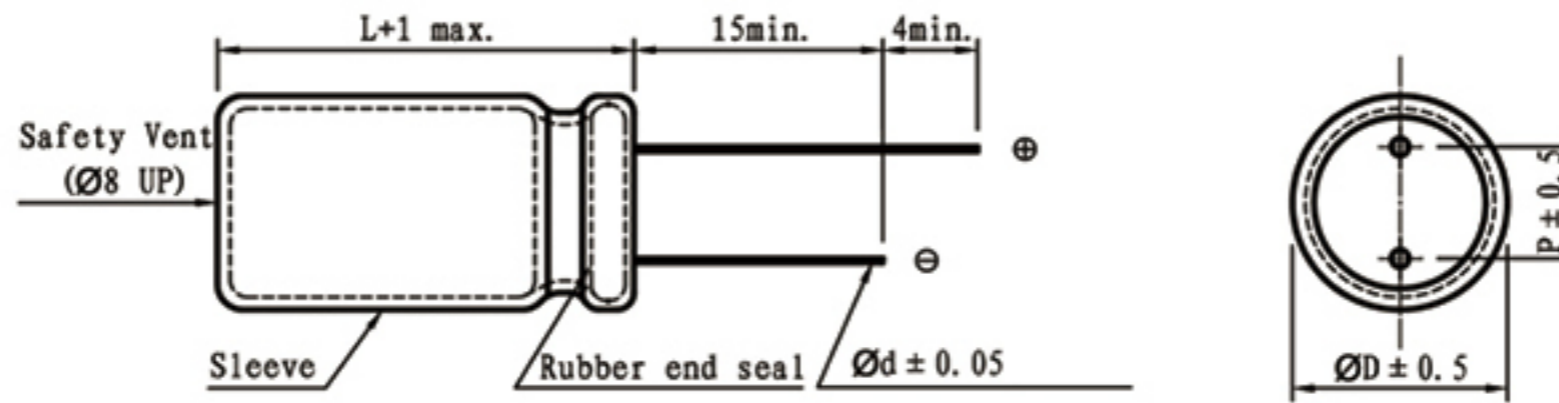
Frequency Coefficient of Permissible Ripple Current

Capacitance (µF)	Frequency (Hz)			
	50	120	1K	≥ 10K
< 100	0.80	1.00	1.30	1.50
≥ 100	0.80	1.00	1.15	1.20

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use , the rms ripple current has to be reduced.

SM series

DIMENSIONS(mm)



ϕD	4	5	6.3	8
P	1.5	2.0	2.5	3.5
ϕd	0.45	0.5	0.5	0.5

STANDARD RATINGS

D×L(mm) ; R.C.(mA rms) at 105°C 120Hz.

Cap (μF)	V Item	6.3		10		16	
		D x L	R.C.	D x L	R.C.	D x L	R.C.
10						4x7	28
22		4x7	34	4x7	37	4x7	44
33		4x7	42	4x7	45	5x7	52
47		4x7	50	5x7	60	5x7	69
100		5x7	75	6.3x7	86	6.3x7	95
220		6.3x7	95	8x7	145	8x7	150
330		8x7	160				

Cap (μF)	V Item	25		35		50	
		D x L	R.C.	D x L	R.C.	D x L	R.C.
0.1						4x7	1.0
0.22						4x7	2.3
0.33						4x7	3.5
0.47						4x7	5.0
1						4x7	10
2.2						4x7	18
3.3				4x7	18	4x7	24
4.7		4x7	22	4x7	22	4x7	28
10		4x7	29	5x7	33	5x7	42
22		5x7	35	6.3x7	55	6.3x7	60
33		6.3x7	62	6.3x7	65	8x7	68
47		8x7	75	8x7	80	8x7	95
100		8x7	95				
150		8x7	105				
180		8x7	120				

SM