

SE series

- 105°C 5000hrs high-temperature, high reliability.
- Suitable for office communicative and industrial equipments.
- RoHS Compliance
- 105°C 5000hrs 耐高溫、高信賴性、長壽命產品。
- 適用於辦公室通訊設備、工業設備。



SPECIFICATIONS

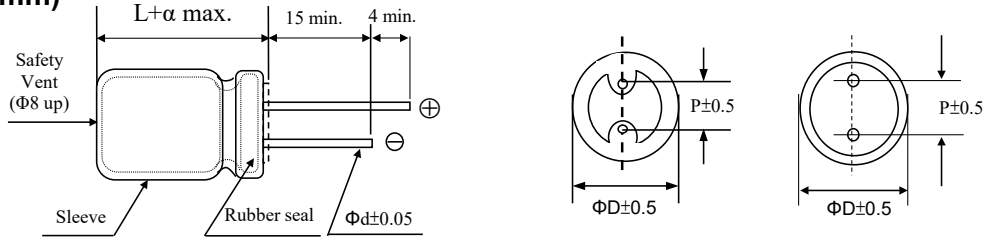
Items 項目	Characteristics 特性												
Capacitance Tolerance 靜電容量誤差	± 20%(120Hz,20°C)												
Operating Temperature Range 適用溫度範圍	- 40 ~ +105°C				- 40 ~ +105°C				-25 ~ +105°C				
Rated Voltage Range 額定電壓範圍	6.3 ~ 100VDC				160~400VDC				420 ~ 450VDC				
Leakage Current 洩漏電流	I ≤ 0.01CV or 3 (µA) which is greater.(After 2 minutes application of DC rated voltage, at 20 °C)							I ≤ 0.03CV +20 (µA) (After 3 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)	6.3	10	16	25	35	50	63	80	100	160~250	350 ~450	
	tan δ(Max)	0.24	0.20	0.17	0.15	0.12	0.10	0.09	0.08	0.08	0.15	0.20	
When nominal capacitance over 1000µF, tanδ shall be added 0.02 to the listed value with increase of every 1000µF .													
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	63	80	100	160~250	350~400	450
	Z(-25°C)/Z(20°C)	4	3	3	2	2	2	2	2	2	4	8	15
	Z(-40°C)/Z(20°C)	8	6	6	4	4	4	4	4	4	6	-	-
Load Life 負荷壽命	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 5000 hours (ΦD≤8:3,000 hours;ΦD=10:4,000 hours) 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 1000 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	JIEC 60384-4 (JIS C 5101-4)												

Frequency Coefficient of Permissible Ripple Current

Rated Voltage (V)	Capacitance (µF)	Frequency (Hz)			
		120	1k	10k	100k
≤ 100	< 100	1.00	1.40	1.60	1.70
	100 ~ 4700	1.00	1.30	1.40	1.50
	> 4700	1.00	1.15	1.20	1.30
≥ 160	2.2 ~ 820	1.00	1.30	1.40	1.50

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DIMENSIONS(mm)



ΦD	5	6.3	8	10	12.5	14.5	16	18	22
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5	7.5	10.0
Φd	0.5	0.5	0.5	0.6	0.6	0.8	0.8	0.8	0.8

α	(L < 20) 1.5
	(L ≥ 20) 2.0

STANDARD RATINGS

DxL(mm), R.C.(mA rms) at 105°C 120 Hz.

Cap (μF)	V	6.3		10		16		25		35		50		63	
		Item	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L
0.47												5x11	8		
1.0												5x11	17		
2.2												5x11	23		
3.3												5x11	31		
4.7												5x11	35		
10								5x11	45	5x11	48	5x11	51	5x11	56
22								5x11	60	6.3x11	78	6.3x11	85	6.3x11	95
33								6.3x11	90	6.3x11	100	8x11.5	102	8x11.5	122
47						5x11	85	6.3x11	105	8x11.5	130	8x11.5	141	10x12.5	152
100		5x11	120	5x11	130	6.3x11	140	8x11.5	185	8x11.5	190	10x12.5	231	10x16	250
220		6.3x11	170	6.3x11	190	8x11.5	240	10x12.5	290	10x12.5	320	10x16	368	10x20	415
330		8x11.5	250	8x11.5	280	8x11.5	310	10x12.5	350	10x16	420	10x20	490	12.5x20	550
470		8x11.5	290	8x11.5	330	10x12.5	380	10x20	465	12.5x20	580	12.5x20	665	16x25	725
1000		10x12.5	490	10x16	580	10x20	670	12.5x20	830	12.5x25	1000	16x25	1080	16x31.5	1135
2200		10x20	830	12.5x20	970	12.5x25	1130	16x25	1210	16x31.5	1450	18x35.5	1695		
3300		12.5x20	1060	12.5x25	1250	16x25	1350	16x31.5	1540	18x35.5	1830	18x40	2070		
4700		12.5x25	1310	16x25	1400	16x31.5	1570	18x35.5	1870	18x40	2150				
6800		16x25	1430	16x31.5	1690	18x35.5	1930	18x40	2120						
10000		16x31.5	1790	18x35.5	2010	18x40	2190								
15000		18x35.5	1980	18x40	2260										
22000		18x40	2290												

Cap (μF)	V	100		160		200		250		400		420		450	
		Item	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L
2.2		5x11	28	6.3x11	28	6.3x11	28	8x11.5	35	8x11.5	35	10x12.5	36	10x12.5	36
3.3		5x11	34	8x11.5	34	8x11.5	35	8x11.5	50	8x11.5	50	10x12.5	48	10x12.5	48
4.7		5x11	40	8x11.5	43	10x12.5	50	8x11.5	55	10x12.5	60	10x16	130	10x16	130
10		6.3x11	66	10x12.5	75	10x16	80	10x16	100	10x16	180	10x16	150	10x20	180
22		8x11.5	112	10x16	130	10x20	140	12.5x20	170	10x20	235	10x20	235	10x20	210
33		10x12.5	155	10x20	170	12.5x20	200	12.5x20	225	10x30	320	12.5x20	320	12.5x20	320
39		10x12.5	160	10x20	190	12.5x20	220	12.5x25	250	12.5x20	345	10x30	365	12.5x25	350
47		10x16	190	12.5x20	230	12.5x20	250	12.5x25	280	10x35	425	12.5x25	415	12.5x25	415
68		10x20	210	12.5x25	260	12.5x25	280	16x20	310	12.5x30	530	12.5x30	530	16x25	580
82		12.5x20	240	16x22	320	16x22	350	16x22	410	12.5x35	610	16x25	605	16x25	605
100		12.5x20	310	16x25	350	16x25	480	16*25	500	16x25	670	16x31.5	790	18x25	690
120										16x31.5	790	16x35	905	18x31.5	815
150										18x31.5	915	18x31.5	915	18x35	935
180										18x35.5	1020	18x40	1050	18x45	1100
220										18x40	1160	18x45	1190	18x50	1190

SE

SE series

- 105°C high-temperature and high voltage 350~450WV , life 3000~5000hrs.
- Specially Size, 8~16mm diameter.
- For LCD-TV and LCD-Monitor Power.
- RoHS Compliance.
- 105°C 耐高溫標準品，高壓350~450WV，壽命3000~5000小時。
- 特殊專用尺寸，直徑8~16mm。
- 使用於LCD TV與LCD Monitor電源應用。



STANDARD RATINGS

DxL(mm), R.C.(mA rms) at 105°C 120 Hz.

Cap (µF)	V Item	350		420		450	
		D x L	R.C.	D x L	R.C.	D x L	R.C.
22				8x50	135	10x30	290
33				8x60	280	10x35	340
	10x30	320	10x30	320			
39		10x35	370	8x60	280	10x40	380
	12.5x30	370	10x35	370			
47		10x40	420	10x40	420	10x45	440
	12.5x35	430					
	14.5x30	450					
53		12.5x35	450	12.5x35	530	12.5x40	480
68		10x60	400	12.5x40	560	12.5x40	550
	12.5x35	460	14.5x31.5	530	14.5x31.5	530	
82		12.5x40	610	12.5x45	640	13x45	630
	16x35	620	14.5x35	620	14.5x35	620	
100		12.5x45	690	14.5x40	670	14.5x40	680
	12.5x50			680			
120		12.5x50	750	14.5x50	700	14.5x60	700
	14.5x60			720			