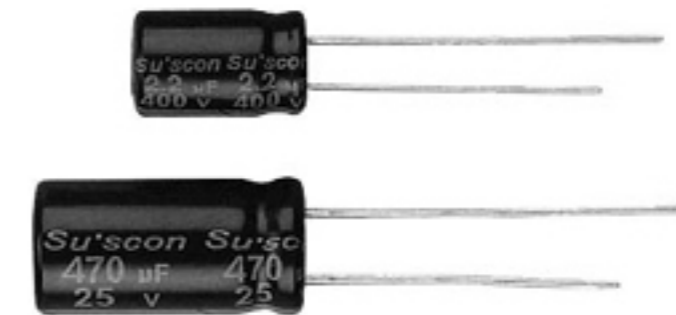


SH series

- High temperature resistance, high reliability.
- 125°C, 2000 hours long life product.
- RoHS Compliance
- 耐高溫、高信賴性。
- 125°C 2000小時長壽命品。



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 ~ +125°C	-40 ~ +125°C														
Rated Voltage Range 額定電壓範圍	10 ~ 100VDC	160 ~ 250VDC														
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)	$I \leq 0.03CV + 20$ (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	200	250	275	350~450	500
	tan δ(Max)	0.24	0.20	0.16	0.14	0.12	0.10	0.10	0.10	0.10	0.10	0.15	0.20	0.20	0.20	0.24
	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	Measurement Frequency: 120Hz.															
	Rated Voltage(V)	10	16	25	35	50	63	100	160	200	250	350~450				
	Impedance Ratio(Max) 阻抗比率(最大值)	Z(-25°C)/Z(20°C)	3	2	2	2	2	2	3	3	3	6	6			
	Z(-40°C)/Z(20°C)	8	6	4	4	4	4	4	6	6	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 2,000 hours at 125°C.															
	Capacitance Change	Within ± 25% 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 125°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 ± 25% 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

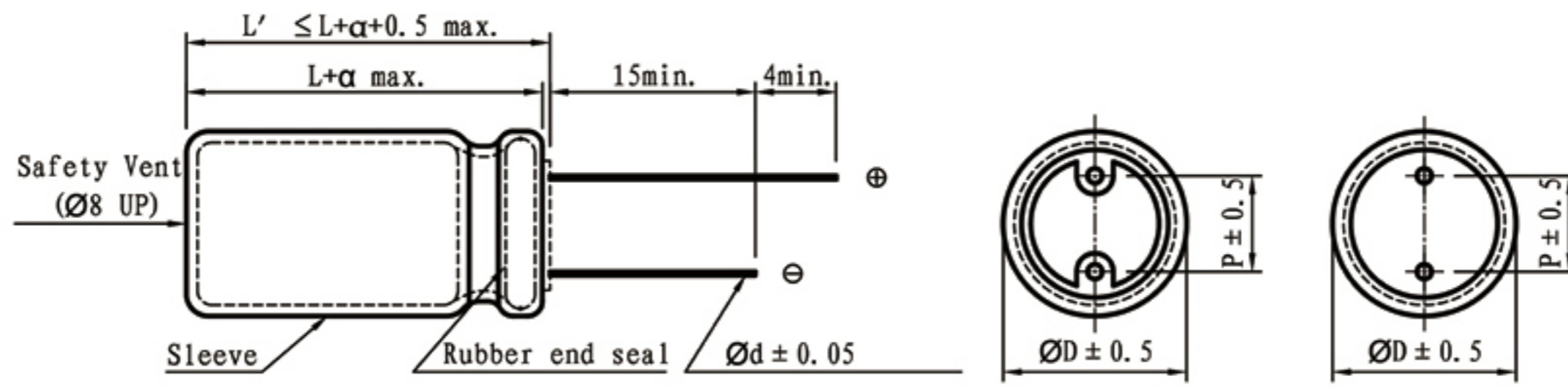
Rated Voltage (V)	Capacitance (µF)	Frequency (Hz)			
		50	120	1K	≥ 10K
≤ 100	< 100	0.75	1.00	1.57	2.00
	100 ~ 470	0.80	1.00	1.34	1.50
	> 470	0.85	1.00	1.10	1.15
≥ 160	1 ~ 100	0.85	1.00	1.40	1.50

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.

SH

SH series

DIMENSIONS(mm)



ϕD	6.3	8	10	13	16
P	2.5	3.5	5.0	5.0	7.5
ϕd	0.5	0.5	0.6	0.6	0.8

α	(L < 16) 1.0 (L ≥ 16) 2.0
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STANDARD RATINGS

D×L(mm) ; R.C.(mA rms) at 125°C 120Hz.

Cap (μF)	V	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
3.3												8x12	28
4.7												8x12	35
10								6.3x11	40	8x12	45	8x12	54
22						6.3x11	70	8x12	78	8x12	80	10x13	92
33				6.3x11	70	8x12	90	8x12	105	8x12	112	10x16	130
47	6.3x11	80	6.3x11	82	8x12	110	8x12	148	10x13	154	10x20	170	
100	6.3x11	105	8x12	146	8x12	220	10x13	252	10x16	267	13x21	285	
220	8x12	230	10x13	300	10x13	450	10x16	530	13x21	568	13x25	585	
330	10x13	310	10x13	385	10x16	620	10x20	710	13x25	880	16x26	950	
470	10x13	420	10x16	520	10x20	800	13x21	890	16x26	900			
1000	10x20	760	13x21	800	13x25	900	16x26	1100					

Cap (μF)	V	100		160		200		250		350		400		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.	
0.47		8x12	15												
1		8x12	22	8x12	28	8x12	28	8x12	40	8x12	40	8x12	42	8x12	45
2.2		8x12	30	8x12	35	8x12	35	10x13	48	10x13	48	10x13	48	10x16	52
3.3		8x12	35	10x13	40	10x16	45	10x16	50	10x16	50	10x16	53	10x20	58
4.7		10x13	42	10x13	50	10x16	60	10x20	65	10x20	53	10x20	62	10x25	65
10		10x16	68	10x16	80	10x20	78	10x20	78	10x25	85	10x25	86	13x21	90
22		10x20	95	10x20	115	10x25	126	13x21	128	13x25	139	13x30	142	16x26	154
33		13x21	150	10x25	154	13x21	157	13x25	171	16x26	189	16x26	189	16x32	203
47		13x25	180	13x25	200	13x25	204	16x26	292	16x32	243	16x32	243		
68		13x25	210	16x26	245	16x26	250	16x32	292						
100		16x26	290	16x32	360	16x36	329								

※ 13mm may be replaced by 12.5mm upon customer's request.

SH