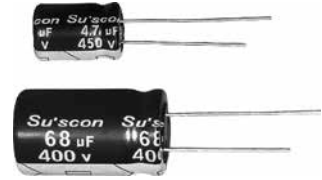


HA series

- 105°C high-temperature resistance, standard product.
- 3000 hours Load Life.
- Suitable for LED and electronic rectifier.
- RoHS Compliance
- 105°C耐高溫標準品。
- 壽命3000小時。
- 適用於節能燈與電子整流器。



SPECIFICATIONS

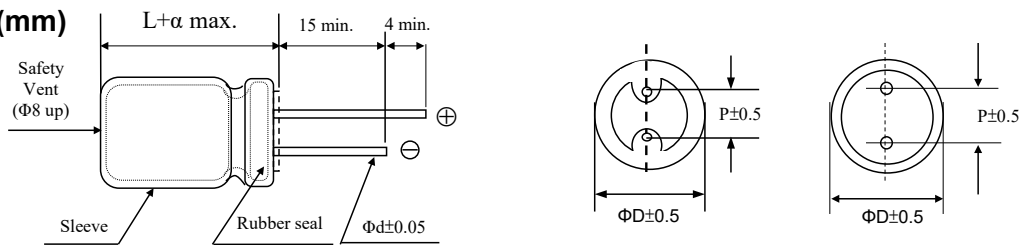
Items 項目	Characteristics 特性						
Capacitance Tolerance 靜電容量誤差	± 20%(120Hz,20°C)						
Operating Temperature Range 適用溫度範圍	-40 ~ +105°C				-25 ~ +105°C		
Rated Voltage Range 額定電壓範圍	160 ~ 400VDC				450VDC		
Leakage Current 洩漏電流	I≤0.02CV +10 (μA) which is greater.(After 2 minutes application of DC rated voltage, at 20°C)				I≤0.03CV +10 (μA) (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)	160	200	250	350	400	450
	tan δ(Max)	0.15	0.15	0.15	0.15	0.20	0.20
Low Temperature Stability 低溫特性 Impedance Ratio(Max) 阻抗比率(最大值)	Measurement Frequency: 120Hz.						
	Rated Voltage(V)	160	200	250	350	400	450
	Z(-25°C)/Z(20°C)	3	3	3	5	5	6
	Z(-40°C)/Z(20°C)	6	6	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 3,000 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 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		500% or less of Initial Specified Value				
Standards 參照標準	IEC 60384-4(JIS C 5101-4)						

Frequency Coefficient of Permissible Ripple Current

Rated Voltage (V)	Frequency (Hz)			
	120	1K	10K ~ 20K	30K ~ 100K
160 ~ 250	0.55	0.85	0.90	1.00
350 ~ 450	0.50	0.80	0.90	1.00

HA series

DIMENSIONS(mm)



ΦD	6.3	8	10	12.5	16	18
P	2.5	3.5	5.0	5.0	7.5	7.5
Φd	0.5	0.5	0.6	0.6	0.8	0.8

α	(L < 20) 1.5
	(L ≥ 20) 2.0

STANDARD RATINGS

DxL(mm), R.C.(mA rms) at 105°C 100 kHz.

Cap (μF)	V	160		200		250	
	Item	D x L	R.C.	D x L	R.C.	D x L	R.C.
2.2		6.3x11	36	6.3x11	38	8x11.5	47
3.3		8x11.5	50	8x11.5	59	8x11.5	69
4.7		8x11.5	55	8x11.5	65	8x11.5	70
5.6		8x11.5	65	8x11.5	75	8x15	85
6.8		8x11.5	70	8x14	80	10x12.5	95
8.2		8x11.5	80	8x15	85	10x16	105
10		8x11.5	85	10x12.5	120	10x16	150
15		8x15	120	10x12.5	150	10x16	180
22		10x16	195	10x16	210	10x20	250
33		10x20	230	12.5x20	280	12.5x20	320
47		12.5x20	310	12.5x20	395	12.5x25	410
68		12.5x20	380	12.5x25	460	16x25	480
82		12.5x25	430	12.5x25	570	16x25	590
100		16x25	640	16x25	670	16x31.5	720
150		16x25	700	16x31.5	790	18x31.5	875
220		16x36	990	18x35.5	1040	18x40	1100

Cap (μF)	V	350		400		450	
	Item	D x L	R.C.	D x L	R.C.	D x L	R.C.
1		8x11.5	33	8x11.5	35	8x15	30
1.5		8x11.5	42	8x11.5	45	10x16	50
2.2		8x11.5	47	8x11.5	55	10x16	60
3.3		8x15	60	10x12.5	75	10x16	90
4.7		10x12.5	95	10x16	100	10x20	115
6.8		10x12.5	100	10x16	125	12.5x20	130
8.2		10x16	130	10x20	145	12.5x20	155
10		10x20	145	10x20	150	12.5x20	160
15		12.5x20	205	12.5x20	210	12.5x20	255
22		12.5x25	270	12.5x25	285	16x25	280
33		16x25	355	16x25	400	16x31.5	455
47		16x25	430	16x25	480	18x31.5	550
68		16x31.5	505	16x31.5	585	18x35.5	690
82		16x36	655	18x31.5	695	18x35.5	805
100		18x31.5	750	18x35.5	795	18x40	860

HA