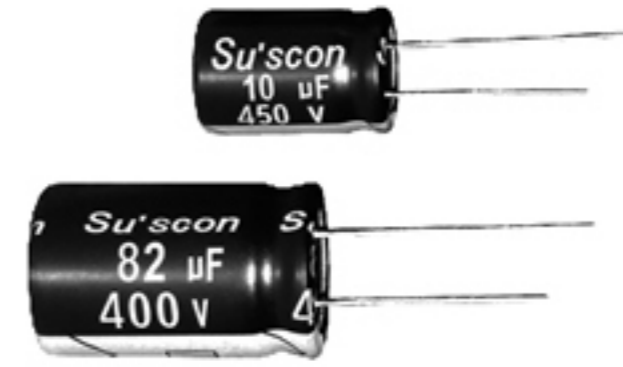


# HB series

- 105°C high-temperature resistance, high ripple current and long life.
- 5000hours load life.
- Suitable for LED and electronic rectifier.
- RoHS Compliance.
- 105°C耐高溫、高紋波、長壽命。
- 壽命為5000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) ( 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	450~500
	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 5,000 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	JIS C 5101-4 (IEC 60384)						

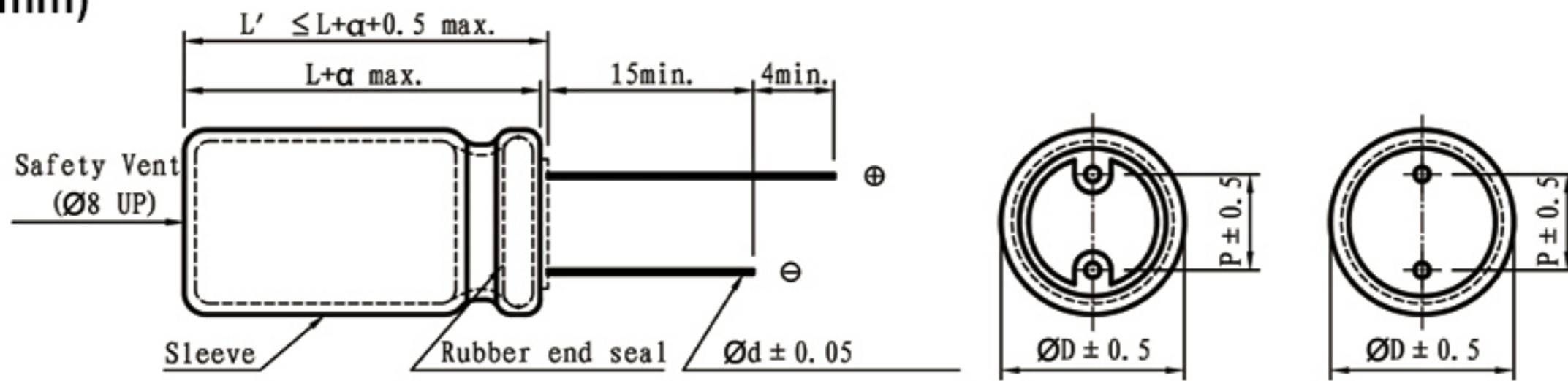
## Frequency Coefficient of Permissible Ripple Current

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

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.

# HB series

## DIMENSIONS(mm)



$\phi D$	6.3	8	10	13	16	18
P	2.5	3.5	5.0	5.0	7.5	7.5
$\phi d$	0.5	0.5	0.6	0.6	0.8	0.8

$\alpha$	(L < 16) 1.0 (L $\geq$ 16) 2.0
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## STANDARD RATINGS

DxL(mm) ; R.C.(mA rms) at 105°C 100KHz.

Cap ( $\mu F$ )	V Item	160		200		250	
		D x L	R.C.	D x L	R.C.	D x L	R.C.
2.2		6.3x11	60	8x12	68	8x12	70
3.3		8x12	72	8x12	75	8x12	80
4.7		8x12	75	8x12	80	10x13	85
5.6		8x12	80	8x16	85	10x13	90
6.8		8x12	90	8x16	95	10x13	100
8.2		8x12	95	8x16	110	10x16	130
10		8x12	100	10x16	180	10x20	200
15		10x16	210	10x16	230	10x20	260
22		10x20	300	10x20	330	10x20	380
33		10x20	330	13x21	400	13x25	450
47		13x21	400	13x21	450	13x25	520
68		13x25	490	16x26	560	16x32	630
82		13x25	550	16x26	640	16x32	700
100		16x26	680	16x26	720	18x32	830
150		16x32	930	16x36	1030	18x35	1230
220		18x32	1050	18x35	1250	18x40	1340

Cap ( $\mu F$ )	V Item	350		400		450	
		D x L	R.C.	D x L	R.C.	D x L	R.C.
1		8x12	43	8x16	50	8x16	60
1.5		8x12	45	10x13	53	10x16	63
2.2		8x12	53	10x13	63	10x16	70
3.3		10x13	80	10x16	90	10x16	95
4.7		10x16	90	10x16	100	10x20	105
5.6		10x16	100	10x16	108	10x20	110
6.8		10x20	130	10x20	155	13x21	160
8.2		13x21	160	13x21	190	13x21	220
10		13x21	190	13x21	230	13x21	250
15		13x25	230	13x25	250	13x25	300
22		16x26	300	16x26	380	16x32	430
33		16x26	350	16x32	430	16x36	560
47		16x36	480	18x26	580	18x32	630
68		18x26	560	18x32	650	18x35	780
82		18x32	730	18x35	800	18x40	950
100		18x35	840	18x40	930		

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