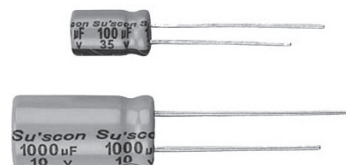


# SA/SB series

- Low leakage current product.
- Suitable for prepositive amplifier of high-grade audio and oscillating return of TV set.
- RoHS Compliance.
- 低洩漏電流產品。
- 適用於高級音響的前置放大器及電視機的振盪迴路等。



## 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	SA : -40 ~ +85°C SB : -40 ~ +105°C								
Rated Voltage Range 額定電壓範圍	6.3 ~ 100VDC								
Leakage Current 洩漏電流	I ≤ 0.002CV or 0.4 (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)	6.3	10	16	25	35	50	63	100
	tan δ(Max)	0.24	0.20	0.16	0.15	0.12	0.10	0.09	0.08
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	100
	Z(-25°C)/Z(20°C)	4	3	2	2	2	2	2	2
Z(-40°C)/Z(20°C)									
8 6 6 4 4 3 3 3									
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 1,000 hours at 105°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 85°C and 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 ± 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)								

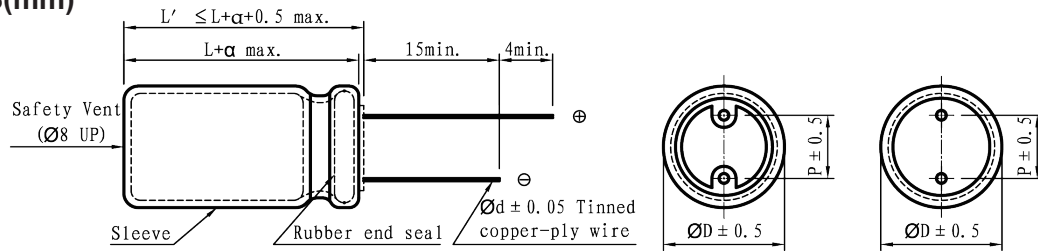
## Frequency Coefficient of Permissible Ripple Current

Capacitance (µF)	Frequency (Hz)			
	50	120	1K	10K
< 100	0.80	1.00	1.30	1.50
100 ~ 1000	0.80	1.00	1.15	1.20
> 1000	0.80	1.00	1.10	1.15

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.

# SA/SB series

## DIMENSIONS(mm)



$\phi D$	5	6.3	8	10	13	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
$\phi d$	0.5	0.5	0.5	0.6	0.6	0.8	0.8

$\alpha$	(L < 16) 1.0
	(L ≥ 16) 2.0

## STANDARD RATINGS

D×L (mm) ; R.C.(mA rms) at 85°C/105°C 120Hz

Cap (μF)	V	6.3		10		16		25	
		D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.
4.7								5x11	45
6.8								5x11	55
10						5x11	55	5x11	70
15						5x11	70	5x11	85
22						5x11	85	5x11	100
33						5x11	100	6.3x11	140
47				5x11	100	6.3x11	140	6.3x11	170
68				6.3x11	150	6.3x11	160	8x12	230
100				6.3x11	180	8x12	230	8x12	280
150				8x12	250	8x12	280	10x13	370
220				8x12	310	10x13	370	10x16	400
330				10x13	400	10x16	420	10x20	490
470	10x13	385	10x16	530	10x16	550	10x20	650	
680	10x13	480	10x16	600	10x20	720	13x21	800	
1000	10x16	640	10x20	780	13x21	900	13x25	1000	
1500	10x20	900	13x25	1020	16x26	1150	16x32	1270	
2200	13x21	1050	13x25	1200	16x26	1300	16x36	1440	
3300	16x26	1300	16x32	1420	16x36	1550	18x40	1720	
4700	16x32	1500	16x36	1650	18x35	1820			

Cap (μF)	V	35		50		63		100	
		D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.
0.1				5x11	1.1			5x11	2.1
0.15				5x11	1.6			5x11	3.2
0.22				5x11	2.3			5x11	4.7
0.33				5x11	3.5			5x11	7.0
0.47				5x11	5.0			5x11	10.1
0.68				5x11	7.3			5x11	14.5
1				5x11	10.7			5x11	19
1.5				5x11	16			5x11	23
2.2				5x11	23			5x11	28
3.3				5x11	40			5x11	45
4.7	5x11	45	5x11	45				5x11	50
6.8	5x11	55	5x11	55	5x11	59	6.3x11	65	
10	5x11	70	5x11	70	6.3x11	75	8x12	90	
15	5x11	85	6.3x11	95	6.3x11	100	8x12	110	
22	6.3x11	110	6.3x11	110	8x12	115	10x13	136	
33	6.3x11	140	8x12	165	8x12	170	10x16	180	
47	8x12	190	8x12	190	10x13	200	10x20	220	
68	8x12	230	10x13	250	10x16	270	10x20	290	
100	10x13	300	10x16	320	10x20	330	13x21	370	
150	10x16	400	10x20	420	13x21	450	13x25	470	
220	10x20	440	13x21	490	13x21	550	16x26	580	
330	13x21	550	13x21	600	13x25	710	16x32	730	
470	13x25	680	13x25	750	16x26	850	18x35	910	
680	13x25	800	16x26	910	16x32	1050			
1000	16x26	1110	16x32	1140	18x35	1330			
1500	16x32	1390	18x40	1480					
2200	18x35	1580							

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

SA/SB