

SB & SB-H Series

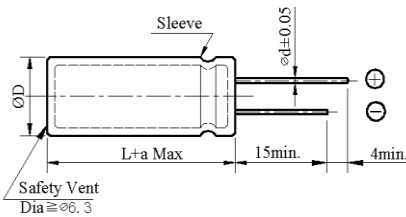
- Standard miniature series with 5mm height at 85 °C & 105 °C



◆ SPECIFICATIONS

Item	Performance Characteristics							
	SB				SB-H			
Series	SB				SB-H			
Category Temperature Range	-40 ~ +85 °C				-40 ~ +105 °C			
Working Voltage Range	4 ~ 50 Vdc							
Capacitance Range	0.1 ~ 470 µF							
Capacitance Tolerance	±20% (at 25 °C and 120Hz)							
Dissipation Factor (tanδ) (at 25 °C, 120Hz)	Rated Voltage (V)	4	6.3	10	16	25	35	50
	tanδ(Max)	0.37	0.28	0.22	0.18	0.16	0.14	0.12
Leakage Current	I=0.01CV or 3µA whichever is greater I : Leakage current (µA) C : Rated capacitance (µF) V : Rated voltage (V) Impress the rated voltage for 2 minutes							
Low Temperature Characteristics Impedance Ratio(MAX)	Rated voltage (V)	4	6.3	10	16	25	35	50
	Z(-40 °C)/Z(+20 °C)	15	8	8	6	4	4	3
Endurance	The following requirements shall be satisfied when the capacitor are restored to 25 °C after the rated voltage applied for 1,000 hours at 85 °C(SB), or 1,000 hours at 105 °C(SB-H).							
	Capacitance change	≅ ±25% of the initial value (4V: ≤ ±30%)						
	Dissipation factor(tanδ)	≅ 200% of the specified value						
	Leakage current	≅ specified value						
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 25 °C after the rated voltage applied for 500 hours at 85 °C(SB), or 500 hours at 105 °C(SB-H) without voltage applied.							
	Capacitance change	≅ ±25% of the initial value						
	Dissipation factor(tanδ)	≅ 200% of the specified value						
	Leakage current	≅ 200% of the specified value						
Others	Conforms to JIS-C-5101-4 (1998), characteristic W							

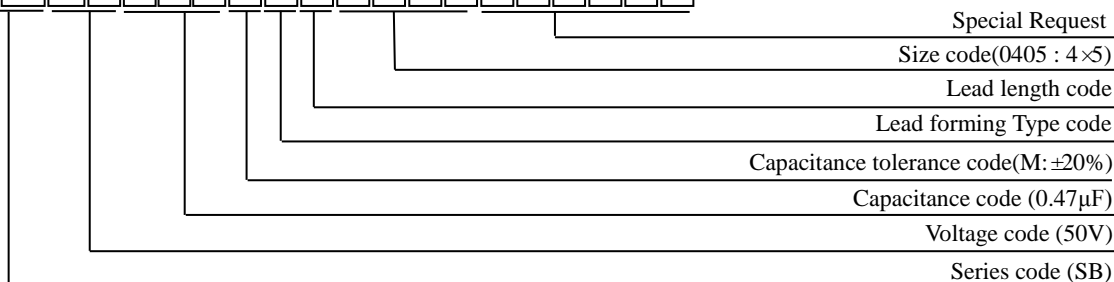
◆ DIMENSIONS (mm)



ΦD	4	5	6.3	8×5
ΦD	ΦD + 0.5 Max			
Φd	0.45	0.45	0.45	0.45
F	1.5	2.0	2.5	3.5
a	L + 1.0 Max			

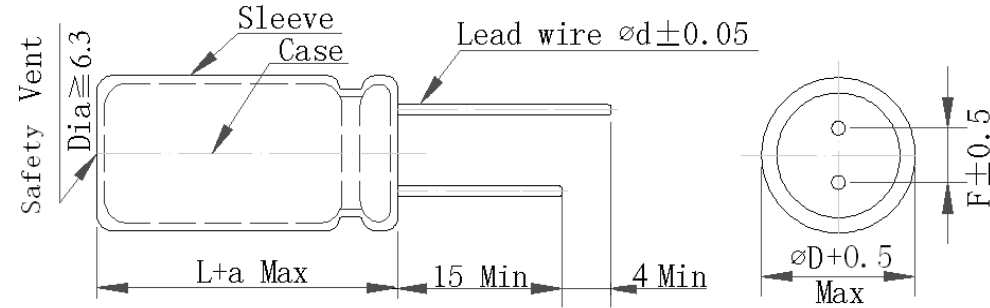
◆ PART NUMBER SYSTEM (Example : 50V 0.47 µF)

S B I H R 4 7 M N N 0 4 0 5



Aluminum Electrolytic Capacitor

Customer	Digi-Key	SERIES	SB-H	NO.:	PUBLISH DATE	2022-03-25
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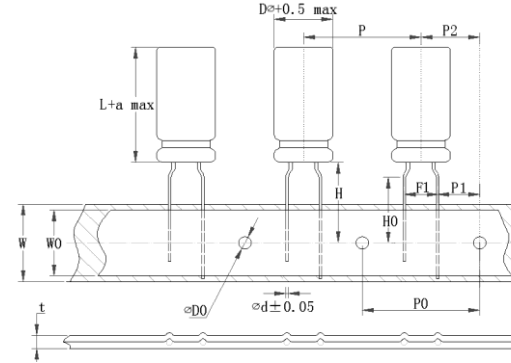
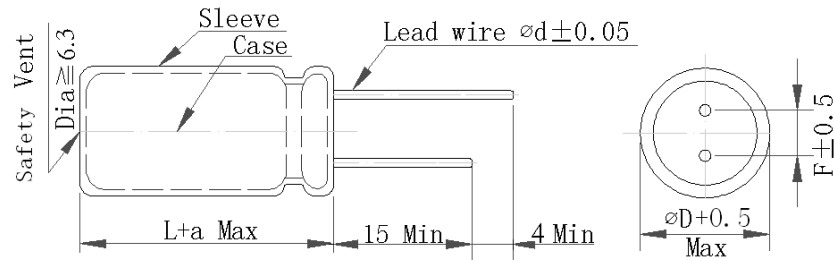
No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tan δ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105°C 120Hz	Rated Ripple Current (mA rms) @ 105°C 100kHz	ESR @ 25°C (m Ω max/ 120Hz)	Impedance @ 20°C (m Ω max/ 100kHz)	Endurance @ 105°C (Hours)	Dimensions (mm)					Appearance Drawing No
															D Φ	L	a	d	F	
1	SB1A470MNN0505H	/	47 μ F	$\pm 20\%$	10 V	/	-40~+105	/	/	35	/	/	/	1000	5	5	/	/	2	---

※Test leakage current before testing dissipation factor and capacitance during the electric characteristic test.

REMARKS:	APPROVED BY	CHECKED BY	PREPARED BY
Sleeve Color: Black.	张洪斌	曾爱娥	梁慧妍

Aluminum Electrolytic Capacitor

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Unit(mm):

P=12.7±1.0	H0=16.0±0.5
P0=12.7±0.2	W =18.0±0.5
P1=3.85±0.5	W0=12.5MIN
P2=6.35±1.0	ΦD0=4.0±0.2
F1=5.0+0.8/-0.2	t=0.7±0.2
H=18.5±0.5	

Original

FIG-1

No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tanδ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105°C 120Hz	Rated Ripple Current (mA rms) @105°C 100kHz	ESR @25°C (mΩ max/ 120Hz)	Impedance @20°C (mΩ max/ 100kHz)	Endurance @ 105°C (Hours)	Dimensions (mm)					Appearance Drawing No
															D Φ	L	a	d	F1	
1	SB1V100MPN0505H	/	10 μF	±20%	35 V	/	-40~+105	/	/	22	/	/	/	1000	5	5	/	/	5	FIG-1

※Test leakage current before testing dissipation factor and capacitance during the electric characteristic test.

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Sleeve Color: Black.	张洪斌	曾爱娥	梁慧妍