SVB series

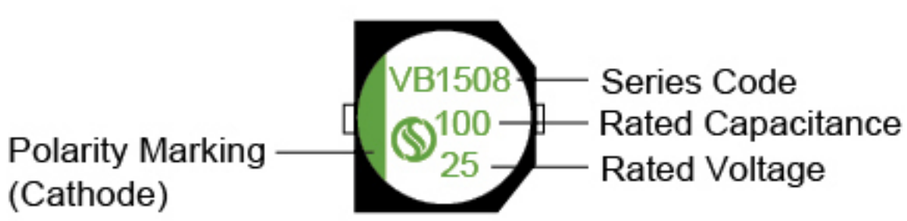
- Low ESR.
- High Voltage, Long Life.
- 125℃, 2,000 to 4,000hrs.
- RoHS compliant
- For automotive moudles and other high temperature applications

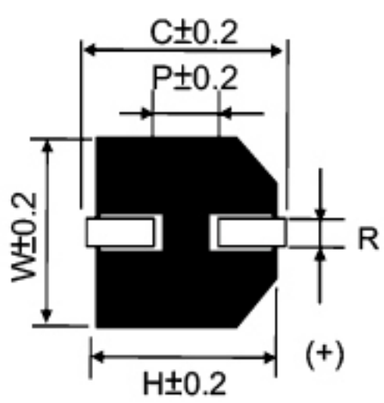
SPECIFICATIONS

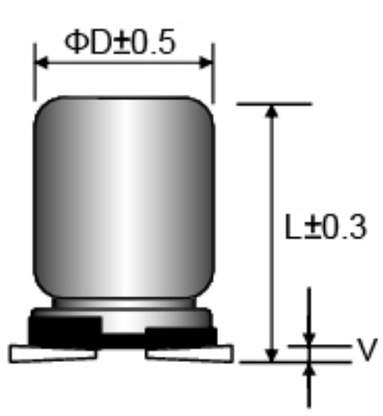
Items	Conditions	Characteristics	
Category Temperature Range	—	-55 to +125℃	
Rated Voltage Range	—	16 ~ 125V	
Capacitance Tolerance	at 20℃,120Hz	±20%(M)	
Surge Voltage	at 15 ~ 35℃	Rated voltage ×1.15V	
Leakage Current	at 20℃ after 2 minutes	I ≦ 0.01CV or 3(μA) Whichever is greater measured,after 2 minutes application of rated working voltage at +20℃. Please see the attached characteristics list	
Dissipation Factor (tan δ)	at 20℃,120Hz	Please see the attached characteristics list	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 2,000 to 4,000 hours at 125℃. Φ6.3=2,000hrs,D≧Φ8=4,000hrs.	Appearance	NO significant damage.
		Capacitance change	≦ ±30% of the initial value.
		DF (tan δ)	≦ 200% of the initial specified value.
		ESR	≦ 200% of the initial specified value.
		Leakage current	≦ The initial specified value.
Damp Heag (Steady State)	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjecting them to store at 60℃, 90 to 95% RH for 1,000 hours, without DC applied.	Appearance	NO significant damage.
		Capacitance change	≦ ±30% of the initial value.
		DF (tan δ)	≦ 200% of the initial specified value.
		ESR	≦ 200% of the initial specified value.
		Leakage current	≦ The initial specified value.
Surge Voltage	The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltages specified at 15~35℃ for 30 seconds through aprotective resistor (R = 1 kΩ) and discharge for 5 minutes 30 seconds.	Appearance	NO significant damage.
		Capacitance change	≦ ±30% of the initial value.
		DF (tan δ)	≦ 200% of the initial specified value.
		ESR	≦ 200% of the initial specified value.
		Leakage current	≦ The initial specified value.

※ Note：If any doubt arises, measure the leakage current after following voltage treatment.
Voltage treatmen：DC rated voltage are applied to the capacitors for 120 minutes at 125℃.

MARKING AND DIMENSIONS







(Unit:mm)

Size	ϕD	L	W	H	C	R	P	V max
6.3×6.0	6.3	6.0	6.6	6.6	7.3	0.5~0.8	2.1	0.3
6.3×7.7	6.3	7.7	6.6	6.6	7.3	0.5~0.8	2.1	0.3
8×10.5	8.0	10.5	8.3	8.3	9.0	0.7~1.1	3.2	0.3
10×10.5	10.0	10.5	10.3	10.3	11.0	0.7~1.3	4.5	0.3
10×12.5	10.0	12.5	10.3	10.3	11.0	0.7~1.3	4.5	0.3

SVB SERIES STANDARD CHARACTERISITICS LIST

Rated voltage (S.V.)	Cap (μF)	Size Code DxL	Leakage current (μA) max.	ESR (mΩ) max. 100k to 300kHz / 20°C	Rated Ripple Current (mA rms) 100kHz / 125°C	D.F. (tanδ) max. 120Hz / 20°C
16 (18.8)	82	6.3×6.0	13	55	970	0.16
	120	6.3×7.7	19	40	1,100	0.16
	270	8x10.5	43	26	1,500	0.16
	470	10x10.5	75	21	2,000	0.16
	560	10x12.5	90	15	2,300	0.16
25 (28.8)	47	6.3×6.0	12	60	890	0.16
	68	6.3×7.7	17	45	1,100	0.16
	150	8x10.5	38	27	1,300	0.16
	270	10x10.5	68	22	1,500	0.16
	330	10x12.5	83	16	1,700	0.16
35 (40.3)	27	6.3×6.0	9	100	760	0.16
	47	6.3×7.7	16	60	900	0.16
	100	8x10.5	35	30	1,200	0.16
	150	10x10.5	53	23	1,400	0.16
	220	10x12.5	77	17	1,700	0.16
40 (46.0)	18	6.3×6.0	7	110	720	0.16
	27	6.3×7.7	11	70	900	0.16
	56	8x10.5	22	32	1,200	0.16
	100	10x10.5	40	24	1,400	0.16
	120	10x12.5	48	18	1,600	0.16
50 (57.5)	10	6.3×6.0	5	120	690	0.16
	15	6.3×7.7	8	80	800	0.16
	33	8x10.5	17	35	1,100	0.16
	56	10x10.5	28	25	1,300	0.16
	82	10x12.5	41	19	1,500	0.16
63 (72.5)	6.8	6.3×6.0	4	150	670	0.16
	10	6.3×7.7	6	100	700	0.16
	22	8x10.5	14	40	1,000	0.16
	33	8x10.5	21	40	1,000	0.16
		10x10.5	21	30	1,200	0.16
	47	10x10.5	30	30	1,200	0.16
	56	10x12.5	35	22	1,400	0.16
80 (92.0)	12	10x10.5	10	70	900	0.16
	15	10x10.5	12	70	900	0.16
	18	10x12.5	14	50	1,100	0.16
100 (115)	10	10x10.5	10	80	800	0.16
	12	10x10.5	12	80	800	0.16
	15	10x12.5	15	60	1,000	0.16
125 (143.8)	10	10x10.5	13	90	700	0.16

Frequency Coefficient of Permissible Ripple Current

Capacitance (μF) \ Frequency (Hz)	100 ≦ F < 1K	1K ≦ F < 10K	10K ≦ F < 100K	100K ≦ F
4.7 < C ≦ 33	0.05	0.32	0.67	1.00
33 < C	0.10	0.35	0.70	1.00