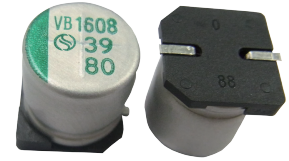


# SVB series

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



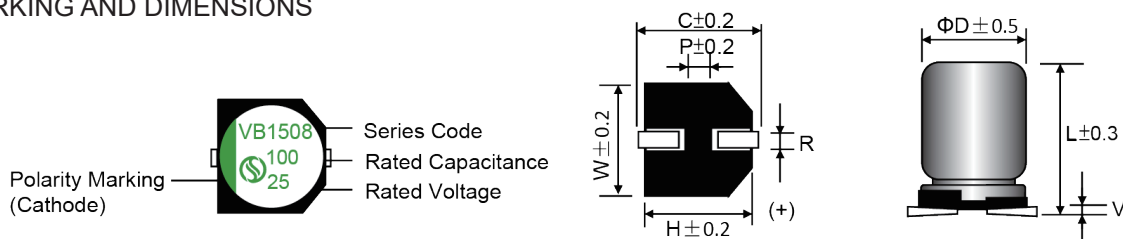
SVB

## SPECIFICATIONS

Items	Conditions	Characteristics	
Category Temperature Range	—	-55 to +125°C	
Rated Voltage Range	—	16 ~ 125V	
Capacitance Tolerance	at 20°C, 120Hz	±20%(M)	
Surge Voltage	at 15 ~ 35°C	Rated voltage × 1.25V	
Leakage Current	at 20°C after 2 minutes	$I \leq 0.01CV$ or $3(\mu A)$ Whichever is greater measured, after 2 minutes application of rated working voltage at +20°C. Please see the attached characteristics list	
Dissipation Factor ( $\tan \delta$ )	at 20°C, 120Hz	Please see the attached characteristics list	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2,000 to 4,000 hours at 125°C. $\Phi 6.3=2,000hrs, D \geq \Phi 8=4,000hrs.$	Appearance	NO significant damage.
		Capacitance change	$\leq \pm 30\%$ of the initial value.
		DF ( $\tan \delta$ )	$\leq 200\%$ of the initial specified value.
		ESR	$\leq 200\%$ of the initial specified value.
		Leakage current	$\leq$ The initial specified value.
Damp Heag (Steady State)	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them to store at 60°C, 90 to 95% RH for 1,000 hours, without DC applied.	Appearance	NO significant damage.
		Capacitance change	$\leq \pm 30\%$ of the initial value.
		DF ( $\tan \delta$ )	$\leq 200\%$ of the initial specified value.
		ESR	$\leq 200\%$ of the initial specified value.
		Leakage current	$\leq$ 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°C for 30 seconds through a protective resistor (R = 1 kΩ) and discharge for 5 minutes 30 seconds.	Appearance	NO significant damage.
		Capacitance change	$\leq \pm 30\%$ of the initial value.
		DF ( $\tan \delta$ )	$\leq 200\%$ of the initial specified value.
		ESR	$\leq 200\%$ of the initial specified value.
		Leakage current	$\leq$ 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°C.

## MARKING AND DIMENSIONS



(Unit:mm)

Size	$\phi D$	L	W	H	C	R	P	V max
6.3×7.7	6.3	7.7	6.6	6.6	7.3	0.5~0.8	2.1	0.3
8×10	8.0	10.5	8.3	8.3	9.0	0.7~1.1	3.2	0.3
10×10	10.0	10.5	10.3	10.3	11.0	0.7~1.3	4.5	0.3
10×12	10.0	12.5	10.3	10.3	11.0	0.7~1.3	4.5	0.3

SVB

**SVB SERIES STANRD 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 (20)	120	6.3x7.7	19	40	1,100	0.16
	270	8x10	43	26	1,500	0.16
	470	10x10	75	21	2,000	0.16
	560	10x12	90	15	2,300	0.16
25 (32)	68	6.3x7.7	17	45	1,000	0.16
	150	8x10	38	27	1,300	0.16
	270	10x10	68	22	1,500	0.16
	330	10x12	83	16	1,700	0.16
35 (44)	47	6.3x7.7	16	60	900	0.16
	100	8x10	35	30	1,200	0.16
	150	10x10	53	23	1,400	0.16
	220	10x12	77	17	1,700	0.16
40 (50)	27	6.3x7.7	11	70	900	0.16
	56	8x10	22	32	1,200	0.16
	100	10x10	40	24	1,400	0.16
	120	10x12	48	18	1,600	0.16
50 (63)	15	6.3x7.7	8	80	800	0.16
	33	8x10	17	35	1,100	0.16
	56	10x10	28	25	1,300	0.16
	82	10x12	41	19	1,500	0.16
63 (79)	10	6.3x7.7	6	100	700	0.16
	22	8x10	14	40	1,000	0.16
	33	8x10	21	40	1,000	0.16
		10x10	21	30	1,200	0.16
	47	10x10	30	30	1,200	0.16
80 (100)	56	10x12	35	22	1,400	0.16
	12	8x10	10	70	900	0.16
	15	10x10	12	70	900	0.16
	18	10x12	14	50	1,100	0.16
100 (125)	10	8x10	10	80	800	0.16
	12	10x10	12	80	800	0.16
	15	10x12	15	60	1,000	0.16
125 (157)	10	10x10	13	90	700	0.16

**Frequency Coefficient of Permissible Ripple Current**

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