

SVB series

- Low ESR
- High voltage, Long life
- 125°C, 2000 to 4000 hours
- For automotive modules and other high temperature applications
- AEC-Q200 Compliant
- RoHS Compliant



SPECIFICATIONS

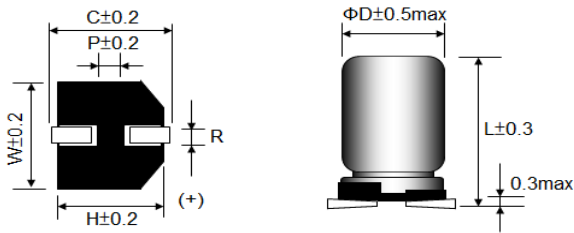
Items	Conditions	Characteristics	
Capacitance Temperature Range	-	-55°C ~ + 125°C	
Rated Voltage Range	-	16 ~ 125V	
Capacitance Tolerance	at 20°C, 120Hz	±20%(M)	
Surge Voltage	at 15 ~ 35°C	Rated voltage x 1.15V	
Leakage Current	at 20°C after 2 minutes	$I \leq 0.01CV$ or $3(\mu A)$ Whichever is greater measured, after 2 minutes application of rated working voltage at +20°C. Please see the attached characteristics list	
Dissipation Factor (tan δ)	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 2000 to 4000 hours at 125°C. ($\Phi 6.3=2000$ hours; $D \geq \Phi 8=4000$ hours)	Appearance	No significant damage
		Capacitance change	$\leq \pm 30\%$ of the initial value
		DF (tan δ)	$\leq 200\%$ 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 1000 hours, without DC applied.	Appearance	No significant damage
		Capacitance change	$\leq \pm 30\%$ of the initial value
		DF (tan δ)	$\leq 200\%$ 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 1000 cycles each consisting of charge with the surge voltages specified at 15~35°C for 30 seconds through a protective resistor ($R=1K\Omega$) and discharge for 5 minutes 30 seconds.	Appearance	No significant damage
		Capacitance change	$\leq \pm 30\%$ of the initial value
		DF (tan δ)	$\leq 200\%$ 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 treatment: DC rated are applied to the capacitors for 120 minutes at 125°C.

Frequency Coefficient of Permissible Ripple Current

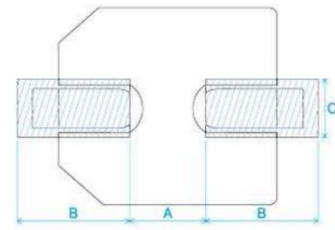
Frequency (Hz)	100 \leq F < 1K	1K \leq F < 10K	10K \leq F < 100K	100K \leq F
4.7 < C \leq 33	0.05	0.32	0.67	1.00
33 < C	0.10	0.35	0.70	1.00

DIMENSIONS(mm)



ΦD	L	W	H	C	R	P
6.3	7.7	6.6	6.6	7.3	0.5~0.8	2.1
8	10.5	8.3	8.3	9.0	0.7~1.1	3.2
10	10.5	10.3	10.3	11.0	0.7~1.3	4.5
10	12.5	10.3	10.3	11.0	0.7~1.3	4.5

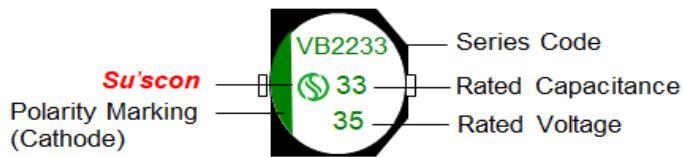
Land / Pad pattern



ΦD	A	B	C
Φ5	1	2.6	1.6
Φ6.3	1.4	3	1.6
Φ8	1.9	3.5	1.6
Φ10	3	3.5	2.5
Φ10(G)	3	3.5	2.5

"(G)" "Anti-vibration Structure"

MARKING



Electric Characteristics

Su'scon P/N	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	E.S.R 100K Hz Max(mΩ)	Leakage Current Max (uA)	D.F. Max (%)	R.C 100K Hz (mA rms)	Load Life (hours)
SVB025M101E7DPE50V00A	100	±20	25	125	6.3*7.7	30	25	16	1400	2000
SVB063M330FABPE50V00A	33	±20	63	125	8*10.5	30	21	16	1200	4000
SVB050M680FABPE50V00A	68	±20	50	125	8*10.5	30	34	16	1250	4000
SVB025M221FABPE50V00A	220	±20	25	125	8*10.5	27	55	16	1600	4000
SVB050M101GABPE50V00A	100	±20	50	125	10*10.5	28	50	16	1600	4000
SVB035M271GABPE50V00A	270	±20	35	125	10*10.5	20	95	16	2000	4000
SVB025M331GABPE50V00A	330	±20	25	125	10*10.5	20	83	16	2000	4000
SVB016M471GABPE50V00A	470	±20	16	125	10*10.5	20	75	16	2100	4000
SVB063M101GCBPE50V00A	100	±20	63	125	10*12.5	26	63	16	2000	4000

REMARKS:

- ESR Test: at 20°C, 100K Hz
- Leakage Current Test: at 20°C for 2 minutes
- Dissipation Factor Test: at 20°C, 120 Hz
- Ripple Current Test: at 125°C, 100 KHz
- Leakage Current: Initial specified value or less
- Special requirements; Conform to the AEC-Q200.
- When have characteristic requested: Load life & shelf life test and etc., judgment standard reference to our catalogue.

US Contact Information

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SVB-REV.1