

SVG series

- Low ESR, Anti-vibration, Peak acceleration: 30G
- High voltage, Long life
- 125°C, 4000 hours
- For automotive modules and other high temperature applications
- AEC-Q200 Compliant
- RoHS Compliant



SPECIFICATIONS

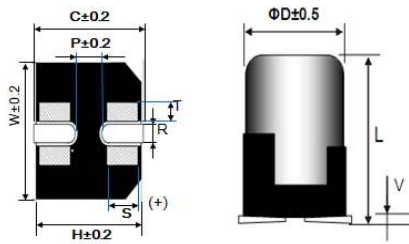
Items	Conditions	Characteristics
Capacitance Temperature Range	-	-55°C ~ + 125°C
Rated Voltage Range	-	16 ~ 125V
Capacitance Tolerance	at 20°C, 120Hz	±20%(M)
Surge Voltage	at 15 ~ 35°C	Rated voltage x 1.15V
Leakage Current	at 20°C after 2 minutes	I ≤ 0.01CV or 3(μA) Whichever is greater measured, after 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 4000 hours at 125°C.	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°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 ≤ ±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 1000 cycles each consisting of charge with the surge voltages specified at 15~35°C for 30 seconds through a protective resistor (R=1KΩ) 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 treatment: DC rated are applied to the capacitors for 120 minutes at 125°C.

Frequency Coefficient of Permissible Ripple Current

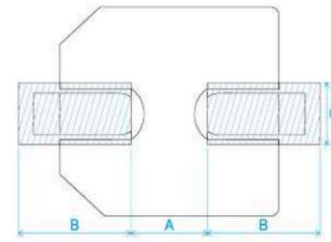
Frequency (Hz)	100 ≤ F < 1K	1K ≤ F < 10K	10K ≤ F < 100K	100K ≤ F
Capacitance(μF) 4.7 < C ≤ 33	0.05	0.32	0.67	1.00
33 < C	0.10	0.35	0.70	1.00

DIMENSIONS(mm)



ΦD	L	W	H	C	R	P	V(max)
8	10.5	8.3	8.3	9.0	0.7to1.1	3.2	0.3
10	10.5	10.3	10.3	11.0	1.0to1.4	4.5	0.3
10	12.5	10.3	10.3	11.0	1.0to1.4	4.5	0.3

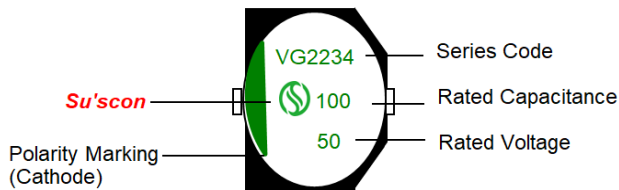
Land / Pad pattern



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)
SVG025M221FABPE50V00A	220	±20	25	125	8*10.5	27	55	16	1600	4000
SVG050M101GABPE50V00A	100	±20	50	125	10*10.5	27	50	16	1600	4000
SVG063M101GCBPE50V00A	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. Peak acceleration: 30G
- When have characteristic requested: Load life & shelf life test and etc., judgment standard reference to our catalogue.

US Contact Information

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SVG-REV.1