

Surface mount type

# SVPG Series



- Low profile (Height 4.5 mm max.)
- Low ESR (8 to 30 mΩ)
- RoHS compliance, Halogen free

## Specifications

Items	Specifications	
Size code	B45	C10
Category temperature range	-55 to +105 °C	
Rated voltage range	16 to 25 V.DC	
Rated capacitance range	15 to 47 μF	270 μF
Capacitance tolerance	±20 % (120 Hz/+20 °C)	
Leakage current	Please see the attached characteristics list	
Dissipation factor (tan δ)	Please see the attached characteristics list	
Endurance	105 °C, 5,000 h, rated voltage applied	
	ΔC/C	Within ±20 % of the initial value
	DF	≤ 1.5 times of the initial limit
	LC	Within the initial limit
Damp heat (Steady State)	60 °C, 90 to 95 %RH, 1,000 h, No-applied voltage	
	ΔC/C	Within ±20 % of the initial value
	DF	≤ 1.5 times of the initial limit
	LC	Within the initial limit (after voltage processing)

## Marking and dimensions

Polarity marking (-)

Lot. No.

Series

R. Capacitance

R. Voltage

0.2 max

(unit : mm)

Size code	φD ±0.5	L <sup>+0.1</sup> / <sub>-0.4</sub>	W ±0.2	H ±0.2	C ±0.2	R	P ±0.2
B45	5.0	4.4	5.3	5.3	6.0	0.6~0.8	1.4
C10	6.3	9.9	6.6	6.6	7.3	0.6~0.8	2.1

## Characteristics list

Series	Rated voltage (V.DC)	Rated capacitance (μF)	Case size (mm)		Size code	Specifications				Standard (Reel size: φ 380)	
			φD	L		Rated ripple current (mA rms) ※1	ESR ※2 (mΩ max.)	tan δ ※3	LC ※4 (μA)	Part number	Min. Packaging Qty (pcs)
SVPG	16	47	5.0	4.4	B45	3200	25	0.12	150.0	16SVPG47M	2500
		270	6.3	9.9	C10	5800	8	0.12	864.0	16SVPG270M	500
	20	33	5.0	4.4	B45	3000	27	0.12	132.0	20SVPG33M	2500
	25	15	5.0	4.4	B45	2800	30	0.12	75.0	25SVPG15M	2500

※1: Rated ripple current (100 kHz/ +105 °C), ※2: ESR (100 kHz to 300 kHz/+20 °C) ※3: tan δ (120 Hz/+20 °C) ※4: After 2 minutes

◆ Please refer to each page in this catalog for "Reflow conditions" and "Taping specifications".

## Frequency Correction factor for ripple current

Frequency	120 Hz ≤ f < 1 kHz	1 kHz ≤ f < 10 kHz	10 kHz ≤ f < 100 kHz	100 kHz ≤ f ≤ 500 kHz
Coefficient	0.05	0.3	0.7	1