

Surface mount type

# SVPE Series



- Super low ESR (8 to 18 mΩ)
- Large capacitance (1,200 μF max.)
- RoHS compliance, Halogen free

## Specifications

Items	Specifications			
Size code	B6	C6	C10	F12
Category temperature range	-55 to +105 °C			
Rated voltage range	2.0 to 16 V,DC			
Rated capacitance range	150 to 390 μF	220 to 390 μF	180 to 1200 μF	470 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, 2,000 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

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
B6	5.0	5.9	5.3	5.3	6.0	0.6~0.8	1.4
C6	6.3	5.9	6.6	6.6	7.3	0.6~0.8	2.1
C10	6.3	9.9	6.6	6.6	7.3	0.6~0.8	2.1
F12	10.0	12.6	10.3	10.3	11.0	0.8~1.1	4.6

(unit : mm)

## 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 <sub>rms</sub> ) ※1	ESR		tan δ ※2	LC ※3 (μA)	Part number	Min. Packaging Qty (pcs)
							100 kHz/20 °C (mΩ max.)	300 kHz/20 °C (mΩ max.)				
SVPE	2	1200	6.3	9.9	C10	5230	8	8	0.12	500.0	2SVPE1200M	500
			270	5.0	5.9	B6	3860	10	9	0.12	500.0	2R5SVPE270M
	2.5	330	5.0	5.9	B6	3150	15	13	0.12	500.0	2R5SVPE330M	1500
			5.0	5.9		3860	10	9	0.12	500.0	2R5SVPE330MY	1500
		390	5.0	5.9	B6	3860	10	9	0.12	700.0	2R5SVPE390MX	1500
			6.3	5.9	C6	3900	10	9	0.12	500.0	2R5SVPE390M	1000
	6.3	150	5.0	5.9	B6	3520	12	10	0.12	500.0	6SVPE150M	1500
			180	5.0		5.9	3150	15	13	0.12	500.0	6SVPE180M
		220	5.0	5.9	B6	3150	15	13	0.12	500.0	6SVPE220MW	1500
			6.3	5.9		C6	3900	10	9	0.12	500.0	6SVPE220M
	10	220	6.3	5.9	C6	2700	20	18	0.12	500.0	10SVPE220M	1000
			180	6.3	9.9	C10	4460	11	10	0.12	576.0	16SVPE180M
	16	470	10.0	12.6	F12	6100	10	9	0.12	1504.0	16SVPE470M	400

※1 : Rated ripple current (100 kHz/ +105 °C), ※2 : tan δ (120 Hz/+20 °C) ※3 : 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