

Surface Mount Type

OS-CON

Series : **SVPE**



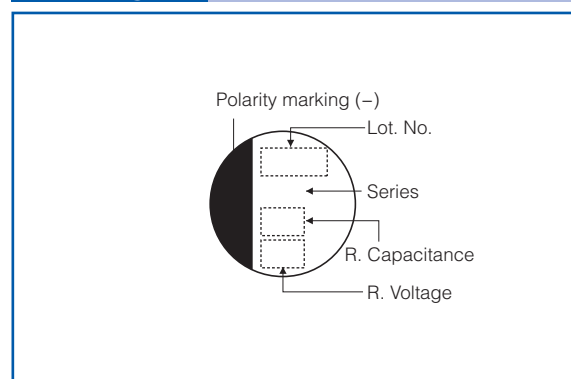
Features

- Super low ESR (8 mΩ to 18 mΩ)
- Large capacitance (1200 μF max.)
- RoHS compliance, Halogen free

Specifications

Size code	B6	C6	C10	F12
Category temperature range	-55 °C to +105 °C			
Rated voltage range	2.5 V.DC to 6.3 V.DC	2.5 V.DC to 10 V.DC	2 V.DC to 16 V.DC	16 V.DC
Rated capacitance range	150 μF to 390 μF	220 μF to 390 μF	180 μF 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, 2000 h, rated voltage applied			
	Capacitance change	Within ±20 % of the initial value		
	tan δ	≤ 150 % of the initial limit		
	DC leakage current	Within the initial limit		
Damp heat (Steady State)	+60 °C, 90 % to 95 %, 1000 h, No-applied voltage			
	Capacitance change	Within ±20 % of the initial value		
	tan δ	≤ 150 % of the initial limit		
	DC leakage current	Within the initial limit (after voltage processing)		

Marking



Dimensions (not to scale)

Side view diagram of a capacitor. The dimensions shown are: outer diameter ϕD , length L , and a maximum thickness of 0.2 mm.

Top view diagram of a capacitor. The dimensions shown are: width W , height H , center-to-center distance C , and radius R .

Unit : mm

Size code	$\phi D \pm 0.5$	$L \begin{smallmatrix} +0.1 \\ -0.4 \end{smallmatrix}$	$W \pm 0.2$	$H \pm 0.2$	$C \pm 0.2$	R	$P \pm 0.2$
B6	5.0	5.9	5.3	5.3	6.0	0.6 to 0.8	1.4
C6	6.3	5.9	6.6	6.6	7.3	0.6 to 0.8	2.1
C10	6.3	9.9	6.6	6.6	7.3	0.6 to 0.8	2.1
F12	10.0	12.6	10.3	10.3	11.0	0.8 to 1.1	4.6

* Externals of figure are the reference.

Characteristics list

Series	Rated voltage (V.DC)	Rated capacitance (μF)	Case size (mm)		Size code	Specifications					Standard (Reel size : ϕ380)	
			ϕD	L		Ripple current (mAr.m.s.)	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	2SVPE1200M	500
	2.5	270	5.0	5.9	B6	3860	10	9	0.12	500	2R5SVPE270M	1500
		330	5.0	5.9		3150	15	13	0.12	500	2R5SVPE330M	1500
		390	5.0	5.9		3860	10	9	0.12	500	2R5SVPE330MY	1500
			5.0	5.9		3860	10	9	0.12	700	2R5SVPE390MX	1500
			6.3	5.9	C6	3900	10	9	0.12	500	2R5SVPE390M	1000
	6.3	150	5.0	5.9	B6	3520	12	10	0.12	500	6SVPE150M	1500
		180	5.0	5.9		3150	15	13	0.12	500	6SVPE180M	1500
		220	5.0	5.9		3150	15	13	0.12	500	6SVPE220MW	1500
			6.3	5.9		3900	10	9	0.12	500	6SVPE220M	1000
		10	220	6.3	5.9	C6	2700	20	18	0.12	500	10SVPE220M
	16	180	6.3	9.9	C10	4460	11	10	0.12	576	16SVPE180M	500
		470	10.0	12.6	F12	6100	10	9	0.12	1504	16SVPE470M	400

*1 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