## Surface Mount Type

# **OS**-CON

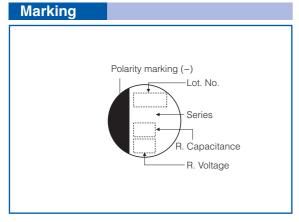


## Series : SVPE

### Features

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

#### **Specifications** B6 C10 F12 Size code C6 Category temperature range -55 °C to +105 °C 2.5 V.DC to 10 V.DC 2 V.DC to 16 V.DC 2.5 V.DC to 6.3 V.DC 16 V.DC Rated voltage range 150 µF to 390 µF 470 µF Rated capacitance range 220 µF to 390 µF 180 µF to 1200 µF ±20 % (120 Hz / + 20 °C) Capacitance tolerance Leakage current Please see the attached characteristics list Dissipation factor (tan $\delta$ ) Please see the attached characteristics list +105 °C, 2000 h, rated voltage applied Within $\pm 20$ % of the initial value $\leq 150$ % of the initial limit Capacitance change Endurance $\tan \delta$ DC leakage current | Within the initial limit +60 °C, 90 % to 95 %, 1000 h, No-applied voltage Capacitance change | Within ±20 % of the initial value Damp heat (Steady State) tan $\delta$ ≤ 150 % of the initial limit DC leakage current Within the initial limit (after voltage processing)



#### **Dimensions (not to scale)** 0.2 max. W Θ Ω Ģ C Т $\oplus$ R Unit : mm Size L +0.1 -0.4 φD±0.5 W±0.2 H±0.2 C±0.2 R P±0.2 code 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 12.6 11.0 10.0 10.3 10.3 0.8 to 1.1 4.6 \* Externals of figure are the reference

### **Characteristics list**

	Rated voltage (V.DC)	Rated capacitance (µF)	Case size (mm)			Specifications				Standard (Reel size : $\phi$ 380)		
Series			φD	L	Size code	Ripple <sup>*1</sup> current (mAr.m.s.)	ES 100 kHz/20 °C (mΩ max.)		tan $\delta^{*^2}$	LC *³ (µA)	Part number	Min. Packaging Q'ty (pcs)
SVPE	2	1200	6.3	9.9	C10	5230	8	8	0.12	500	2SVPE1200M	500
	2.5	270	5.0	5.9		3860	10	9	0.12	500	2R5SVPE270M	1500
		330	5.0	5.9	B6	3150	15	13	0.12	500	2R5SVPE330M	1500
			5.0	5.9		3860	10	9	0.12	500	2R5SVPE330MY	1500
		390	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		3520	12	10	0.12	500	6SVPE150M	1500
		180	5.0	5.9	B6	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	C6	3900	10	9	0.12	500	6SVPE220M	1000
	10	220	6.3	5.9		2700	20	18	0.12	500	10SVPE220M	1000
	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  $\delta$  (120 Hz/+20 °C) \*3 After 2 minutes

◆ Please refer to each page in this catarog 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								

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