

Surface Mount Type

OS-CON

Series : **SVPC**



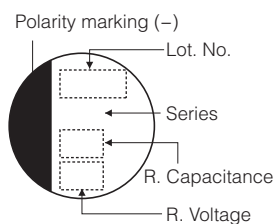
Features

- Low ESR (9 mΩ to 30 mΩ)
- Large capacitance (2700 µF max.)
- RoHS compliance, Halogen free

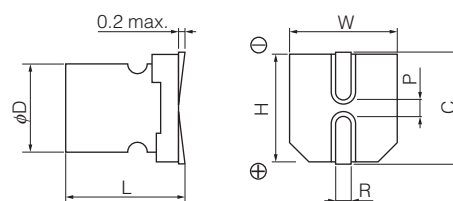
Specifications

Size code	B6	C6	E7	E12	F12
Category temperature range	-55 °C to +105 °C				
Rated voltage range	2.5 V.DC to 16 V.DC				2.5 V.DC
Rated capacitance range	39 µF to 180 µF	68 µF to 560 µF	120 µF to 680 µF	270 µF to 1500 µF	2700 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)



Unit : mm

Size code	φD±0.5	L ^{+0.1} _{-0.4}	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 to 0.8	1.4
C6	6.3	5.9	6.6	6.6	7.3	0.6 to 0.8	2.1
E7	8.0	6.9	8.3	8.3	9.0	0.6 to 0.8	3.2
E12	8.0	11.9	8.3	8.3	9.0	0.8 to 1.1	3.2
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* ¹ current (mAr.m.s.)	ESR		tan δ* ²	LC* ³ (μA)	Part number	Min. Packaging Q'ty (pcs)
							100 kHz/20 °C (mΩ max.)	300 kHz/20 °C (mΩ max.)				
SVPC	2.5	180	5.0	5.9	B6	1970	30	26	0.12	300	2R5SVPC180M	1500
			5.0	5.9		2200	24	20	0.12	300	2R5SVPC180MY	1500
			5.0	5.9		2800	19	16	0.12	300	2R5SVPC180MV	1500
		390	6.3	5.9	C6	2410	25	22	0.12	300	2R5SVPC390M	1000
			6.3	5.9		3160	15	13	0.12	300	2R5SVPC390MV	1000
			6.3	5.9		3500	16	14	0.12	300	2R5SVPC560M	1000
		680	8.0	6.9	E7	3370	20	17	0.12	500	2R5SVPC680M	1000
		820	8.0	11.9	E12	5380	9	8	0.15	500	2R5SVPC820M	400
		1500	8.0	11.9		5150	10	9	0.15	750	2R5SVPC1500M	400
		2700	10.0	12.6	F12	5070	12	10	0.15	1350	2R5SVPC2700M	400
	4.0	150	5.0	5.9	B6	1970	30	26	0.12	300	4SVPC150M	1500
			5.0	5.9		2240	23	20	0.12	300	4SVPC150MY	1500
			5.0	5.9		2730	20	17	0.12	300	4SVPC150MV	1500
		330	6.3	5.9	C6	2320	27	23	0.12	300	4SVPC330M	1000
			6.3	5.9		2630	21	18	0.12	300	4SVPC330MY	1000
			6.3	5.9		3160	15	13	0.12	300	4SVPC330MV	1000
		560	8.0	6.9	E7	3220	22	19	0.12	500	4SVPC560M	1000
			8.0	11.9	E12	5380	9	8	0.15	500	4SVPC560MX	400
		1200	8.0	11.9		4700	12	10	0.15	960	4SVPC1200M	400
		1500	8.0	11.9		4700	12	10	0.15	1200	4SVPC1500M	400
	6.3	100	5.0	5.9	B6	1970	30	26	0.12	300	6SVPC100M	1500
			5.0	5.9		2150	25	21	0.12	300	6SVPC100MY	1500
		120	5.0	5.9	C6	2660	21	18	0.12	300	6SVPC120MV	1500
		220	6.3	5.9		2320	27	23	0.12	300	6SVPC220M	1000
			6.3	5.9		3160	15	13	0.12	300	6SVPC220MV	1000
		330	6.3	5.9	E7	3390	17	15	0.12	415	6SVPC330M	1000
		390	8.0	6.9		3220	22	19	0.12	491	6SVPC390M	1000
		820	8.0	11.9	E12	4700	12	10	0.15	1033	6SVPC820M	400
	10	68	5.0	5.9	B6	1970	30	26	0.12	300	10SVPC68M	1500
			5.0	5.9		2540	23	20	0.12	300	10SVPC68MV	1500
		120	6.3	5.9	C6	2320	27	23	0.12	300	10SVPC120M	1000
			6.3	5.9		2600	22	19	0.12	300	10SVPC120MV	1000
		270	8.0	6.9	E7	3220	22	19	0.12	500	10SVPC270M	1000
		330	8.0	6.9		3460	19	17	0.12	660	10SVPC330M	1000
	16	39	5.0	5.9	B6	1820	35	30	0.12	300	16SVPC39M	1500
			5.0	5.9		2350	27	23	0.12	300	16SVPC39MV	1500
		68	6.3	5.9	C6	2200	30	26	0.12	300	16SVPC68M	1000
			6.3	5.9		2440	25	22	0.12	300	16SVPC68MV	1000
		100	6.3	5.9	E7	2490	24	23	0.12	300	16SVPC100M	1000
		120	8.0	6.9		2900	27	23	0.12	500	16SVPC120M	1000
		150	8.0	6.9		3220	22	21	0.12	500	16SVPC150M	1000
		270	8.0	11.9	E12	4070	16	14	0.15	864	16SVPC270M	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