

Surface  
mount type

# SVPC Series



- LowESR(9 to 30 mΩ)
- Large capacitance (2,700 μF max.)
- RoHS compliance, Halogen free

## Specifications

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

(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
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
E7	8.0	6.9	8.3	8.3	9.0	0.6~0.8	3.2
E12	8.0	11.9	8.3	8.3	9.0	0.8~1.1	3.2
F12	10.0	12.6	10.3	10.3	11.0	0.8~1.1	4.6

## 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		tan δ ※2	LC ※3 (μA)	Part number	Min. Packaging Qty (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	300.0	2R5SVPC180M	1500	
			5.0	5.9		2200	24	20	0.12	300.0	2R5SVPC180MY	1500	
			5.0	5.9		2800	19	16	0.12	300.0	2R5SVPC180MV	1500	
		390	6.3	5.9	C6	2410	25	22	0.12	300.0	2R5SVPC390M	1000	
			6.3	5.9		3160	15	13	0.12	300.0	2R5SVPC390MV	1000	
			6.3	5.9		3500	16	14	0.12	300.0	2R5SVPC560M	1000	
		680	8.0	6.9	E7	3370	20	17	0.12	500.0	2R5SVPC680M	1000	
			820	8.0	11.9	E12	5380	9	8	0.15	500.0	2R5SVPC820M	400
				8.0	11.9		5150	10	9	0.15	750.0	2R5SVPC1500M	400
	2700		10.0	12.6	F12	5070	12	10	0.15	1350.0	2R5SVPC2700M	400	
	4.0	150	5.0	5.9	B6	1970	30	26	0.12	300.0	4SVPC150M	1500	
			5.0	5.9		2240	23	20	0.12	300.0	4SVPC150MY	1500	
			5.0	5.9		2730	20	17	0.12	300.0	4SVPC150MV	1500	
		330	6.3	5.9	C6	2320	27	23	0.12	300.0	4SVPC330M	1000	
			6.3	5.9		2630	21	18	0.12	300.0	4SVPC330MY	1000	
			6.3	5.9		3160	15	13	0.12	300.0	4SVPC330MV	1000	
		560	8.0	6.9	E7	3220	22	19	0.12	500.0	4SVPC560M	1000	
			8.0	11.9	E12	5380	9	8	0.15	500.0	4SVPC560MX	400	
			1200	8.0	11.9	E12	4700	12	10	0.15	960.0	4SVPC1200M	400
	1500	8.0	11.9	E12	4700	12	10	0.15	1200.0	4SVPC1500M	400		
	6.3	100	5.0	5.9	B6	1970	30	26	0.12	300.0	6SVPC100M	1500	
			5.0	5.9		2150	25	21	0.12	300.0	6SVPC100MY	1500	
		120	5.0	5.9	C6	2660	21	18	0.12	300.0	6SVPC120MV	1500	
		220	6.3	5.9		2320	27	23	0.12	300.0	6SVPC220M	1000	
			6.3	5.9		3160	15	13	0.12	300.0	6SVPC220MV	1000	
		330	6.3	5.9		3390	17	15	0.12	415.0	6SVPC330M	1000	
		390	8.0	6.9		E7	3220	22	19	0.12	491.0	6SVPC390M	1000
		820	8.0	11.9		E12	4700	12	10	0.15	1033.0	6SVPC820M	400
	10	68	5.0	5.9	B6	1970	30	26	0.12	300.0	10SVPC68M	1500	
			5.0	5.9		2540	23	20	0.12	300.0	10SVPC68MV	1500	
		120	6.3	5.9	C6	2320	27	23	0.12	300.0	10SVPC120M	1000	
			6.3	5.9		2600	22	19	0.12	300.0	10SVPC120MV	1000	
		270	8.0	6.9	E7	3220	22	19	0.12	500.0	10SVPC270M	1000	
	330	8.0	6.9	E7	3460	19	17	0.12	660.0	10SVPC330M	1000		
	16	39	5.0	5.9	B6	1820	35	30	0.12	300.0	16SVPC39M	1500	
			5.0	5.9		2350	27	23	0.12	300.0	16SVPC39MV	1500	
68		6.3	5.9	C6	2200	30	26	0.12	300.0	16SVPC68M	1000		
		6.3	5.9		2440	25	22	0.12	300.0	16SVPC68MV	1000		
100		6.3	5.9	C6	2490	24	23	0.12	300.0	16SVPC100M	1000		
120		8.0	6.9	E7	2900	27	23	0.12	500.0	16SVPC120M	1000		
150		8.0	6.9	E7	3220	22	21	0.12	500.0	16SVPC150M	1000		
270	8.0	11.9	E12	4070	16	14	0.15	864.0	16SVPC270M	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