

Surface
mount type

SVPF Series



- High voltage (50 V max.)
- Large capacitance (1,000 μF max.)
- 105 °C 5,000 h
- RoHS compliance, Halogen free

Specifications

Items	Specifications				
Size code	B6	C6	E7	E12	F12
Category temperature range	-55 to +105 °C				
Rated voltage range	16 to 50 V.DC				
Rated capacitance range	27 to 82 μF	10 to 180 μF	18 to 270 μF	39 to 560 μF	68 to 1000 μF
Capacitance tolerance	$\pm 20\%$ (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, 5,000 h, rated voltage applied				
	$\Delta C/C$	Within $\pm 20\%$ 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				
	$\Delta C/C$	Within $\pm 20\%$ 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	$\phi D \pm 0.5$	$L \begin{smallmatrix} +0.1 \\ -0.4 \end{smallmatrix}$	$W \pm 0.2$	$H \pm 0.2$	$C \pm 0.2$	R	$P \pm 0.2$
B6	5.0	5.9	5.3	5.3	6.0	0.6~0.8	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 (μ F)	Case size (mm)		Size code	Specifications				Standard (Reel size: ϕ 380)	
			ϕ D	L		Rated ripple current (mA _{RMS}) ※1	ESR ※2 (m Ω max.)	$\tan \delta$ ※3	LC ※4 (μ A)	Part number	Min. Packaging Qty (pcs)
SVPF	16	82	5.0	5.9	B6	3000	27	0.12	262.0	16SVPF82M	1500
		180	6.3	5.9	C6	3300	22	0.12	576.0	16SVPF180M	1000
		270	8.0	6.9	E7	3300	22	0.12	864.0	16SVPF270M	1000
		560	8.0	11.9	E12	4950	14	0.12	1792.0	16SVPF560M	400
		1000	10.0	12.6	F12	5400	12	0.12	3200.0	16SVPF1000M	400
	20	56	5.0	5.9	B6	2800	30	0.12	224.0	20SVPF56MX	1500
		120	6.3	5.9	C6	3200	25	0.12	480.0	20SVPF120M	1000
		180	8.0	6.9	E7	3200	25	0.12	720.0	20SVPF180M	1000
		390	8.0	11.9	E12	4950	14	0.12	1560.0	20SVPF390M	400
		560	10.0	12.6	F12	5400	12	0.12	2240.0	20SVPF560M	400
	25	27	5.0	5.9	B6	2450	40	0.12	135.0	25SVPF27MX	1500
		47	6.3	5.9	C6	2800	30	0.12	235.0	25SVPF47M	1000
		56	6.3	5.9	C6	2800	30	0.12	280.0	25SVPF56M	1000
		82	8.0	6.9	E7	3000	28	0.12	410.0	25SVPF82M	1000
		100	8.0	6.9	E7	3200	24	0.12	500.0	25SVPF100M	1000
		180	8.0	11.9	E12	4650	16	0.12	900.0	25SVPF180M	400
		330	10.0	12.6	F12	5000	14	0.12	1650.0	25SVPF330M	400
	35	22	6.3	5.9	C6	2600	35	0.12	154.0	35SVPF22M	1000
		39	8.0	6.9	E7	2800	30	0.12	273.0	35SVPF39M	1000
		82	8.0	11.9	E12	4000	20	0.12	574.0	35SVPF82M	400
		120	10.0	12.6	F12	4400	18	0.12	840.0	35SVPF120M	400
	50	10	6.3	5.9	C6	2500	40	0.12	100.0	50SVPF10M	1000
		18	8.0	6.9	E7	2700	35	0.12	180.0	50SVPF18M	1000
		39	8.0	11.9	E12	3800	25	0.12	390.0	50SVPF39M	400
		68	10.0	12.6	F12	4300	20	0.12	680.0	50SVPF68M	400

※1: Rated ripple current (100 kHz/ +105 °C), ※2: ESR (100 kHz to 300 kHz/+20 °C) ※3: $\tan \delta$ (120 Hz/+20 °C) ※4: 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 \leq f < 1 kHz	1 kHz \leq f < 10 kHz	10 kHz \leq f < 100 kHz	100 kHz \leq f \leq 500 kHz
Coefficient	0.05	0.3	0.7	1