

Surface Mount Type



Series : **SVF**



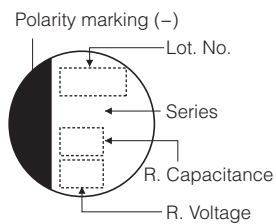
Features

- High voltage (50 V.DC max.)
- Large capacitance (1000 μ F max.)
- 125 °C 1000 h
- RoHS compliance, Halogen free

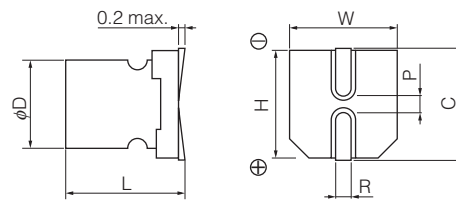
Specifications

Size code	B6	C6	E7	E12	F12
Category temperature range	-55 °C to +125 °C				
Rated voltage range	16 V.DC to 25 V.DC		16 V.DC to 50 V.DC		
Rated capacitance range	27 μ F to 82 μ F	10 μ F to 180 μ F	18 μ F to 270 μ F	39 μ F to 560 μ F	68 μ F to 1000 μ F
Capacitance tolerance	\pm 20 % (120 Hz / + 20 °C)				
Leakage current	Please see the attached characteristics list				
Dissipation factor ($\tan \delta$)	Please see the attached characteristics list				
Endurance	+125 °C, 1000 h, rated voltage applied				
	Capacitance change	Within \pm 20 % of the initial value			
	$\tan \delta$	\leq 200 % 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 \pm 20 % of the initial value			
	$\tan \delta$	\leq 150 % of the initial limit			
	DC leakage current	Within the initial limit (after voltage processing)			

Marking



Dimensions (not to scale)



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
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 current (mAr.m.s.) ^{*1}	Allowable ^{*1} ripple current (mAr.m.s.)	ESR ^{*2} (mΩ max.)	tan δ ^{*3}	LC ^{*4} (μA)	Part number	Min. Packaging Q'ty (pcs)
SVF	16	82	5.0	5.9	B6	940	3000	27	0.12	262	16SVF82M	1500
		180	6.3	5.9	C6	1040	3300	22	0.12	576	16SVF180M	1000
		270	8.0	6.9	E7	1040	3300	22	0.12	864	16SVF270M	1000
		560	8.0	11.9	E12	1560	4950	14	0.12	1792	16SVF560M	400
		1000	10.0	12.6	F12	1700	5400	12	0.12	3200	16SVF1000M	400
	20	56	5.0	5.9	B6	880	2800	30	0.12	224	20SVF56M	1500
		120	6.3	5.9	C6	1010	3200	25	0.12	480	20SVF120M	1000
		180	8.0	6.9	E7	1010	3200	25	0.12	720	20SVF180M	1000
		390	8.0	11.9	E12	1560	4950	14	0.12	1560	20SVF390M	400
		560	10.0	12.6	F12	1700	5400	12	0.12	2240	20SVF560M	400
	25	27	5.0	5.9	B6	770	2450	40	0.12	135	25SVF27M	1500
		47	6.3	5.9	C6	880	2800	30	0.12	235	25SVF47M	1000
		56	6.3	5.9		880	2800	30	0.12	280	25SVF56M	1000
		82	8.0	6.9	E7	940	3000	28	0.12	410	25SVF82M	1000
		100	8.0	6.9		1010	3200	24	0.12	500	25SVF100M	1000
		180	8.0	11.9	E12	1470	4650	16	0.12	900	25SVF180M	400
		330	10.0	12.6	F12	1580	5000	14	0.12	1650	25SVF330M	400
	35	22	6.3	5.9	C6	820	2600	35	0.12	154	35SVF22M	1000
		39	8.0	6.9	E7	880	2800	30	0.12	273	35SVF39M	1000
		82	8.0	11.9	E12	1260	4000	20	0.12	574	35SVF82M	400
		120	10.0	12.6	F12	1390	4400	18	0.12	840	35SVF120M	400
	50	10	6.3	5.9	C6	790	2500	40	0.12	100	50SVF10M	1000
		18	8.0	6.9	E7	850	2700	35	0.12	180	50SVF18M	1000
		39	8.0	11.9	E12	1200	3800	25	0.12	390	50SVF39M	400
68		10.0	12.6	F12	1350	4300	20	0.12	680	50SVF68M	400	

*1 Ripple current (100 kHz/ +105 °C < Tx ≤ +125 °C) /Allowable ripple current (100 kHz/ Tx ≤ +105 °C), *2 ESR (100 kHz to 300 kHz/+20 °C)

*3 tan δ (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 ≤ 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