

Surface mount type

SVPD Series



- 125 °C 2,000 h
- Guaranteed at 85 °C 85 %
- RoHS compliance, Halogen free

Specifications

Items	Specifications				
Size code	C6	E7	F8	E12	F12
Category temperature range	-55 to +125 °C				
Rated voltage range	10 to 35 V.DC				
Rated capacitance range	10 to 56 μ F	8.2 to 82 μ F	18 to 39 μ F	22 to 47 μ F	47 to 82 μ F
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	125 °C, 2,000 h, rated voltage applied				
	Δ C/C	Within \pm 20 % of the initial value			
	DF	\leq 2 times of the initial limit			
	LC	Within the initial limit			
Damp heat (Steady State)	85 °C, 85 to 90 %RH, 1,000 h, rated voltage applied				
	Δ C/C	Within \pm 20 % of the initial value			
	DF	\leq 2 times of the initial limit			
	LC	Within the initial limit (after voltage processing)			

Marking and dimensions

Size code	ϕ 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
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
F8	10.0	7.9	10.3	10.3	11.0	0.6~0.8	4.6
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

(unit : mm)

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}) \times 1	Allowable ripple current (mA _{RMS}) \times 1	ESR \times 2 (m Ω max.)	tan δ \times 3	LC \times 4 (μ A)	Part number	Min. Packaging Qty (pcs)
SVPD	10	56	6.3	5.9	C6	538	1700	45	0.12	112.0	10SVDPD56M	1000
		82	8.0	6.9	E7	670	2120	40	0.12	262.0	16SVDPD82M	1000
	25	10	6.3	5.9	C6	474	1500	65	0.10	50.0	25SVDPD10M	1000
		22	8.0	6.9	E7	580	1835	48	0.10	110.0	25SVDPD22M	1000
		39	10.0	7.9	F8	664	2100	45	0.10	195.0	25SVDPD39M	500
		47	8.0	11.9	E12	943	2980	30	0.12	235.0	25SVDPD47M	400
	35	82	10.0	12.6	F12	1202	3800	28	0.12	410.0	25SVDPD82M	400
		8.2	8.0	6.9	E7	400	1300	70	0.10	57.0	35SVDPD8R2M	1000
		18	10.0	7.9	F8	550	1800	60	0.10	126.0	35SVDPD18M	500
		22	8.0	11.9	E12	700	2300	50	0.12	154.0	35SVDPD22M	400
	47	10.0	12.6	F12	1150	3650	30	0.12	329.0	35SVDPD47M	400	

\times 1 : Rated ripple current (100 kHz/105 °C < T_x \leq 125 °C) / Allowable ripple current (100 kHz / T_x \leq 105 °C)

\times 2: ESR (100 kHz~300 kHz/+20 °C) \times 3: tan δ (120 Hz/+20 °C) \times 4: After 2 minutes

◆Please refer to each page in this catalog for "Reflow conditions" and "Taping specifications" .

Frequency Correction factor for ripple currentt

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