

## Surface Mount Type



### Series : SVPD

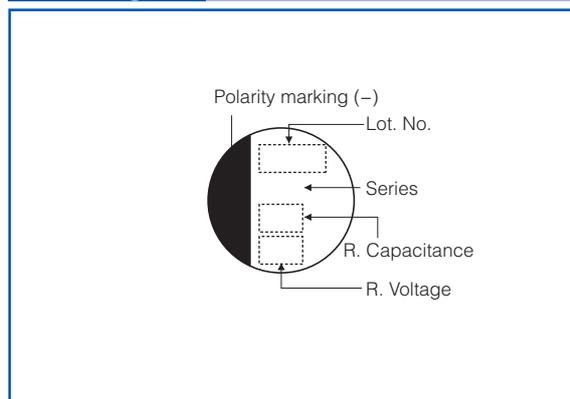
#### Features

- 125 °C 2000 h
- Guaranteed at 85 °C 85 %
- RoHS compliance, Halogen free

#### Specifications

Size code	C6	E7	F8	E12	F12
Category temperature range	-55 °C to +125 °C				
Rated voltage range	10 V.DC to 25 V.DC	16 V.DC to 35 V.DC	25 V.DC to 35 V.DC		
Rated capacitance range	10 μF to 56 μF	8.2 μF to 82 μF	18 μF to 39 μF	22 μF to 47 μF	47 μF to 82 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	+125 °C, 2000 h, rated voltage applied				
	Capacitance change	Within ±20 % of the initial value			
	tan δ	≤ 200 % of the initial limit			
	DC leakage current	Within the initial limit			
Damp heat (Steady State)	+85 °C, 85 % to 90 %, 1000 h, rated voltage applied				
	Capacitance change	Within ±20 % of the initial value			
	tan δ	≤ 200 % of the initial limit			
	DC leakage current	Within the initial limit (after voltage processing)			

#### Marking



#### Dimensions (not to scale)

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
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
F8	10.0	7.9	10.3	10.3	11.0	0.6 to 0.8	4.6
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 (mAr.m.s.)	Allowable *1 ripple current (mAr.m.s.)	ESR *2 (mΩ max.)	tan δ *3	LC *4 (μA)	Part number	Min. Packaging Qty (pcs)
SVPD	10	56	6.3	5.9	C6	538	1700	45	0.12	112	10SVPD56M	1000
	16	82	8.0	6.9	E7	670	2120	40	0.12	262	16SVPD82M	1000
	25	10	6.3	5.9	C6	474	1500	65	0.10	50	25SVPD10M	1000
		22	8.0	6.9	E7	580	1835	48	0.10	110	25SVPD22M	1000
		39	10.0	7.9	F8	664	2100	45	0.10	195	25SVPD39M	500
		47	8.0	11.9	E12	943	2980	30	0.12	235	25SVPD47M	400
	35	82	10.0	12.6	F12	1202	3800	28	0.12	410	25SVPD82M	400
		8.2	8.0	6.9	E7	400	1300	70	0.10	57	35SVPD8R2M	1000
		18	10.0	7.9	F8	550	1800	60	0.10	126	35SVPD18M	500
		22	8.0	11.9	E12	700	2300	50	0.12	154	35SVPD22M	400
	47	10.0	12.6	F12	1150	3650	30	0.12	329	35SVPD47M	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

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