

Surface Mount Type



Series : **SVPS**

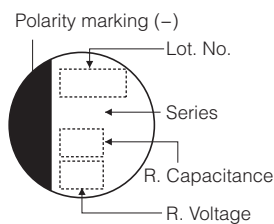
Features

- 105 °C 5000 h
- RoHS compliance, Halogen free

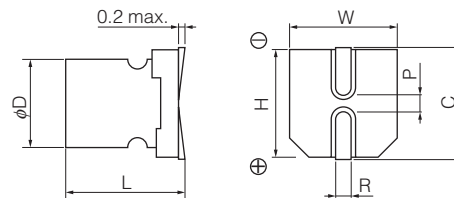
Specifications

Size code	A5	B6	C6	E7	F8
Category temperature range	-55 °C to +105 °C				
Rated capacitance range	4 V.DC to 10 V.DC	4 V.DC to 16 V.DC	4 V.DC to 20 V.DC	4 V.DC to 25 V.DC	4 V.DC to 16 V.DC
Rated capacitance range	10 μF to 33 μF	22 μF to 68 μF	22 μF to 150 μF	10 μF to 270 μF	100 μF to 680 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, 5000 h, rated voltage applied (25 V.DC → 20 V.DC applied)				
	Capacitance change	Within ±20 % of the initial value			
	tan δ	≤ 150 % 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 ±20 % of the initial value			
	tan δ	≤ 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	$P \pm 0.2$
A5	4.0	5.4	4.3	4.3	5.0	0.6 to 0.8	1.0
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
F8	10.0	7.9	10.3	10.3	11.0	0.6 to 0.8	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* ¹ (mA r.m.s.)	ESR* ² (mΩ max.)	tan δ* ³	LC* ⁴ (μA)	Part number	Min. Packaging Qty (pcs)
SVPS	4.0	33	4.0	5.4	A5	740	200	0.15	66	4SVPS33M	2000
		68	5.0	5.9	B6	1970	30	0.12	300	4SVPS68M	1500
		150	6.3	5.9	C6	2570	22	0.12	300	4SVPS150M	1000
		270	8.0	6.9	E7	3220	22	0.12	500	4SVPS270M	1000
		680	10.0	7.9	F8	4130	20	0.12	544	4SVPS680M	500
	6.3	22	4.0	5.4	A5	740	200	0.12	69.3	6SVPS22M	2000
		47	5.0	5.9	B6	1970	30	0.12	300	6SVPS47M	1500
		120	6.3	5.9	C6	2570	22	0.12	300	6SVPS120M	1000
		220	8.0	6.9	E7	3220	22	0.12	500	6SVPS220M	1000
		470	10.0	7.9	F8	4130	20	0.12	592	6SVPS470M	500
	10	10	4.0	5.4	A5	700	220	0.10	50	10SVPS10M	2000
			4.0	5.4		740	200	0.10	75	10SVPS15M	2000
		150	5.0	5.9	B6	1100	70	0.12	165	10SVPS33M	1500
			6.3	5.9	C6	2200	30	0.12	300	10SVPS68M	1000
			8.0	6.9	E7	2760	30	0.12	500	10SVPS150MX	1000
				7.9	F8	3020	30	0.12	300	10SVPS150M	500
			10.0	7.9		3770	24	0.12	660	10SVPS330M	500
	16	22	5.0	5.9	B6	1060	90	0.10	176	16SVPS22M	1500
		39	6.3	5.9	C6	2460	24	0.12	300	16SVPS39M	1000
		82	8.0	6.9	E7	2760	30	0.12	262	16SVPS82M	1000
		100	10.0	7.9	F8	2670	35	0.12	320	16SVPS100M	500
			180	7.9		3430	29	0.12	576	16SVPS180M	500
	20	22	6.3	5.9	C6	1450	60	0.10	88	20SVPS22M	1000
		47	8.0	6.9	E7	1890	45	0.12	188	20SVPS47M	1000
			10	8.0		6.9	1500	60	0.10	125	25SVPS10M

*1 Ripple current (100 kHz/ +105 °C),

: The surface temperature of aluminum case top must not exceed 105 °C. A rise in temperature due to self-heating by ripple current should be factored in.

*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