



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Surface Mount Type



Series : **SVPK**



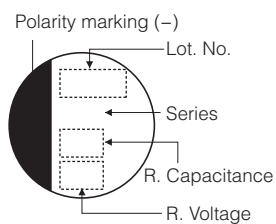
Features

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

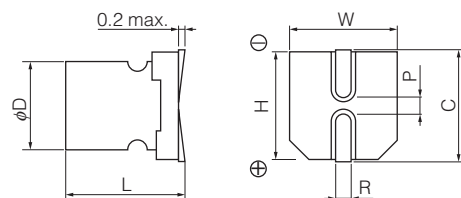
Specifications

Size code	B6	C6	E7	E12	F12
Category temperature range	-55 °C to +125 °C				
Rated voltage range	25 V.DC to 50 V.DC				
Rated capacitance range	10 μF to 30 μF	22 μF to 82 μF	33 μF to 120 μF	68 μF to 270 μF	120 μF to 470 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, 1000 h, rated voltage applied				
	Capacitance change	Within ±20 % of the initial value			
	tan δ	≤ 200 % of 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	φD±0.5	L ^{+0.1} _{-0.4}	W±0.2	H±0.2	C±0.2	R	P±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

* 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 current (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)
SVPK	25	33	5.0	5.9	B6	820	2600	35	0.12	165	25SVPK33M	1500
		82	6.3	5.9	C6	960	3060	25	0.12	410	25SVPK82M	1000
		120	8.0	6.9	E7	1010	3200	24	0.12	600	25SVPK120M	1000
		270	8.0	11.9	E12	1470	4650	16	0.12	1350	25SVPK270M	400
		470	10.0	12.6	F12	1590	5000	14	0.12	2350	25SVPK470M	400
	35	22	5.0	5.9	B6	820	2600	35	0.12	154	35SVPK22M	1500
		47	6.3	5.9	C6	930	2950	27	0.12	329	35SVPK47M	1000
		82	8.0	6.9	E7	960	3060	25	0.12	574	35SVPK82M	1000
		180	8.0	11.9	E12	1260	4000	20	0.12	1260	35SVPK180M	400
		330	10.0	12.6	F12	1390	4400	18	0.12	2310	35SVPK330M	400
	50	10	5.0	5.9	B6	550	1750	80	0.12	100	50SVPK10M	1500
		22	6.3	5.9	C6	820	2600	35	0.12	220	50SVPK22M	1000
		33	8.0	6.9	E7	850	2700	35	0.12	330	50SVPK33M	1000
		68	8.0	11.9	E12	1200	3800	25	0.12	680	50SVPK68M	400
		120	10.0	12.6	F12	1350	4300	20	0.12	1200	50SVPK120M	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