

Surface
mount type

SVPA Series



- LowESR (18mΩ max.)
- High ripple (4240mArms)
- RoHS compliance, Halogen free

Specifications

Items	Specifications			
	B6	C6	E7	F8
Size code	B6	C6	E7	F8
Category temperature range	-55 to +105 °C			
Rated voltage range	2.5 to 20 V.DC			
Rated capacitance range	10 to 82 μF	22 to 180 μF	47 to 330 μF	180 to 820 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, 2,000 h, rated voltage applied			
	ΔC/C	Within±20 % of the initial value		
	DF	≤1.5 times of the initial limit		
	LC	Within the initial limit		
Damp heat (Steady State)	60°C, 90 to 95%RH, 1,000h, No-applied voltage			
	ΔC/C	Within±20 % of the initial value		
	DF	≤1.5 times of the initial limit		
	LC	Within the initial limit (after voltage processing)		

Marking and dimensions

(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
F8	10.0	7.9	10.3	10.3	11.0	0.6~0.8	4.6

Characteristics list

Series	Rated voltage (V.DC)	Rated capacitance (μF)	Case size (mm)		Size code	Specifications				Standard (Reel size: φ 380)	
			φD	L		Rated ripple current (mA rms) ※1	ESR ※2 (mΩ max.)	tan δ ※3	LC ※4 (μA)	Part number	Min. Packaging Qty (pcs)
SVPA	2.5	82	5.0	5.9	B6	1970	30	0.12	300	2R5SHPA82MAA	1500
		180	6.3	5.9	C6	2690	20	0.12	300	2R5SHPA180MAA	1000
		330	8.0	6.9	E7	3370	20	0.12	500	2R5SHPA330MAA	1000
		820	10.0	7.9	F8	4240	19	0.12	500	2R5SHPA820M	500
	4.0	68	5.0	5.9	B6	1970	30	0.12	300	4SHPA68MAA	1500
		150	6.3	5.9	C6	2570	22	0.12	300	4SHPA150MAA	1000
		270	8.0	6.9	E7	3220	22	0.12	500	4SHPA270MAA	1000
		680	10.0	7.9	F8	4130	20	0.12	544	4SHPA680M	500
	6.3	47	5.0	5.9	B6	1970	30	0.12	300	6SHPA47MAA	1500
		120	6.3	5.9	C6	2570	22	0.12	300	6SHPA120MAA	1000
		220	8.0	6.9	E7	3220	22	0.12	500	6SHPA220MAA	1000
		470	10.0	7.9	F8	4130	20	0.12	592	6SHPA470M	500
	10	68	6.3	5.9	C6	2200	30	0.12	300	10SHPA68MAA	1000
		150	8.0	6.9	E7	2760	30	0.12	500	10SHPA150MAA	1000
		330	10.0	7.9	F8	3770	24	0.12	660	10SHPA330M	500
	16	39	6.3	5.9	C6	2040	35	0.12	300	16SHPA39MAA	1000
			6.3	5.9	C6	2460	24	0.12	300	16SHPA39MAAY	1000
		82	8.0	6.9	E7	2760	30	0.12	262	16SHPA82MAA	1000
		180	10.0	7.9	F8	3430	29	0.12	576	16SHPA180M	500
	20	10	5.0	5.9	B6	1700	40	0.12	80	20SHPA10M	1500
		22	6.3	5.9	C6	2040	35	0.12	88	20SHPA22M	1000
		47	8.0	6.9	E7	2630	33	0.12	188	20SHPA47M	1000

※1: Rated ripple current (100 kHz/ +105 °C), ※2: ESR (100 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