

Surface Mount Type



Series : **SVPA**



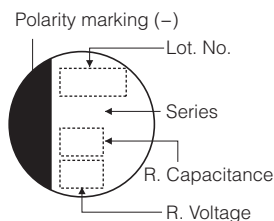
Features

- Low ESR (18 mΩ max.)
- High ripple (4240 mA.r.m.s.)
- RoHS compliance, Halogen free

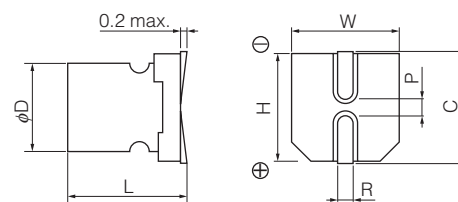
Specifications

Size code	B6	C6	E7	F8
Category temperature range	-55 °C to +105 °C			
Rated voltage range	2.5 V.DC to 20 V.DC			2.5 V.DC to 16 V.DC
Rated capacitance range	10 μF to 82 μF	22 μF to 180 μF	47 μF to 330 μF	180 μF 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, 2000 h, rated voltage applied			
	Capacitance change	Within ±20 % of the initial value		
	tan δ	≤ 150 % 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 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 * ¹ current (mA r.m.s.)	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	2R5SVPA82MAA	1500
		180	6.3	5.9	C6	2690	20	0.12	300	2R5SVPA180MAA	1000
		330	8.0	6.9	E7	3370	20	0.12	500	2R5SVPA330MAA	1000
		820	10.0	7.9	F8	4240	19	0.12	500	2R5SVPA820M	500
	4.0	68	5.0	5.9	B6	1970	30	0.12	300	4SVPA68MAA	1500
		150	6.3	5.9	C6	2570	22	0.12	300	4SVPA150MAA	1000
		270	8.0	6.9	E7	3220	22	0.12	500	4SVPA270MAA	1000
		680	10.0	7.9	F8	4130	20	0.12	544	4SVPA680M	500
	6.3	47	5.0	5.9	B6	1970	30	0.12	300	6SVPA47MAA	1500
		120	6.3	5.9	C6	2570	22	0.12	300	6SVPA120MAA	1000
		220	8.0	6.9	E7	3220	22	0.12	500	6SVPA220MAA	1000
		470	10.0	7.9	F8	4130	20	0.12	592	6SVPA470M	500
	10	68	6.3	5.9	C6	2200	30	0.12	300	10SVPA68MAA	1000
		150	8.0	6.9	E7	2760	30	0.12	500	10SVPA150MAA	1000
		330	10.0	7.9	F8	3770	24	0.12	660	10SVPA330M	500
	16	39	6.3	5.9	C6	2040	35	0.12	300	16SVPA39MAA	1000
			6.3	5.9		2460	24	0.12	300	16SVPA39MAAY	1000
		82	8.0	6.9	E7	2760	30	0.12	262	16SVPA82MAA	1000
		180	10.0	7.9	F8	3430	29	0.12	576	16SVPA180M	500
	20	10	5.0	5.9	B6	1700	40	0.12	80	20SVPA10M	1500
22		6.3	5.9	C6	2040	35	0.12	88	20SVPA22M	1000	
47		8.0	6.9	E7	2630	33	0.12	188	20SVPA47M	1000	

*1 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

Guidelines and precautions regarding the technical information and use of our products described in this online catalog.

- If you want to use our products described in this online catalog for applications requiring special qualities or reliability, or for applications where the failure or malfunction of the products may directly jeopardize human life or potentially cause personal injury (e.g. aircraft and aerospace equipment, traffic and transportation equipment, combustion equipment, medical equipment, accident prevention, anti-crime equipment, and/or safety equipment), it is necessary to verify whether the specifications of our products fit to such applications. Please ensure that you will ask and check with our inquiry desk as to whether the specifications of our products fit to such applications use before you use our products.
- The quality and performance of our products as described in this online catalog only apply to our products when used in isolation. Therefore, please ensure you evaluate and verify our products under the specific circumstances in which our products are assembled in your own products and in which our products will actually be used.
- If you use our products in equipment that requires a high degree of reliability, regardless of the application, it is recommended that you set up protection circuits and redundancy circuits in order to ensure safety of your equipment.
- The products and product specifications described in this online catalog are subject to change for improvement without prior notice. Therefore, please be sure to request and confirm the latest product specifications which explain the specifications of our products in detail, before you finalize the design of your applications, purchase, or use our products.
- The technical information in this online catalog provides examples of our products' typical operations and application circuits. We do not guarantee the non-infringement of third party's intellectual property rights and we do not grant any license, right, or interest in our intellectual property.
- If any of our products, product specifications and/or technical information in this online catalog is to be exported or provided to non-residents, the laws and regulations of the exporting country, especially with regard to security and export control, shall be observed.

<Regarding the Certificate of Compliance with the EU RoHS Directive/REACH Regulations>

- The switchover date for compliance with the RoHS Directive/REACH Regulations varies depending on the part number or series of our products.
- When you use the inventory of our products for which it is unclear whether those products are compliant with the RoHS Directive/REACH Regulation, please select "Sales Inquiry" in the website inquiry form and contact us.

We do not take any responsibility for the use of our products outside the scope of the specifications, descriptions, guidelines and precautions described in this online catalog.
