OS-CON

OS-CON Line-up

Guidelines and precautions for use

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Packing
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Reliability

SVPF
SVPE
SVPS
SVPD
SVPC
SVPB
SVPA
SVQP

SVP

Catalog Deletion and EOL series

POSCAP

POSCAP Line-up

Guidelines and precautions for use Series system

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Recommended soldering condition

Fundamental structure

Characteristics

Logicality

Characteristics
Reliability

TPU

TPH

TPG

TPSF

TPE

TPB/TPC

TPL·TPLF

TPF

TA

TV

TH

TGC

Surface SVPF Series

RoHS compliance

Large capacitance · High voltage 105°C 5,000h

SVPF is the high voltage version of the SVPC series. Ideal for use in high voltage lines such as the input side of DC/DC converters. This product can support lead free-reflow.**2

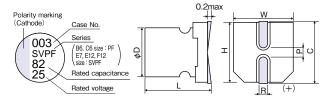


Specifications

Items	Condition	Specifications						
Rated voltage (V	-			16	20	25	35	50
Surge voltage (V) Room temper	Room temperature			23	29	40	57
Category temperature range (C	_			-55 to +105				
Capacitance tolerance (%) 120Hz/20	120Hz/20°C			M: ±20			
Dissipation Factor (DF)	120Hz/20	120Hz/20°C			Please see the attached characteristics list			
Leakage current*1	Rated voltage applied,	Rated voltage applied, after 2 minutes			Please see the attached characteristics list			
Equivalent series resistance (ESF) 100kHz to 300k	z to 300kHz/20℃			Please see the attached characteristics list			
Characteristics of impedance ratio at high temp.	Based the value at	-55℃	Z/Z20c		(0.75 to 1.25	5	
and low temp.	100kHz, +20℃	+105℃	Z/Z2oc	0.75 to 1.25				
	105°C, 5,000h, Rated voltage applied	△(△C/C Within ±20%		0% of the in	% of the initial value		
Endurance		DF		Within 1.5 times of the initial limit				
Endurance		ESR		Within 1.5 times of the initial limit				
		LC		Within the initial limit				
	0000 00 . 050/511	△C/C		Within ±20% of the initial value				
Damp heat(Steady state)	60°C, 90 to 95%RH, 1,000h,	DF		Within 1.5 times of the initial limit				
Bamp neat(Steady State)	No-applied voltage	ESR		Within 1.5 times of the initial limit				
		L	_C	Within the initial limit (after voltage processing)				
		△C/C		Within ±10% of the initial value				
Resistance to soldering heat**	VPS (230°C X 75s)	DF		Within 1.3 times of the initial limit				
Tiodictarios to soldering fleat	V. G (EGGG X 703)	ESR		Within 1.3 times of the initial limit				
		L	_C	Within the initial limit (after voltage processing)				

- **1 When measured values are questionable, measure after voltage processing mentioned below. Voltage processing: Apply voltage for 120 minutes at 105°C.
- *2 Please refer to page 26 for reflow soldering conditions.

Marking and dimensions



(unit : mr							nit : mm)
Size code	φD ±0.5	L +0.1 -0.4	W ±0.2	H ±0.2	C ±0.2	R	P ±0.2
В6	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
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

Size list

RV : Rated voltage

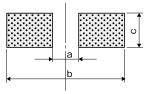
RV μF	16	20	25	35	50
10					C6
18					E7
22				C6	
27			В6		
39				E7	E12
47			C6		
56		В6	C6		
68					F12
82	В6		E7	E12	
100			E7		
120		C6		F12	
180	C6	E7	E12		
270	E7				
330			F12		
390		E12			
560	E12	F12			
1000	F12				

Catalog Deletion and EOL models

SVPF series characteristics list

Size code	Part number	Rated voltage (V)	Rated capacitance (µF)	ESR(mΩ) (max) 100kHz to 300kHz / 20°C	Allowable ripple current 1 OOkHz(mArms)	DF (% max)	Leakage current (µA)(max) After 2 minutes
	25SVPF27MX	25	27	40	2450	12	135
В6	20SVPF56MX	20	56	30	2800	12	224
	16SVPF82M	16	82	27	3000	12	262
	50SVPF10M	50	10	40	2500	12	100
	35SVPF22M	35	22	35	2600	12	154
	25SVPF47M	25	47	30	2800	12	235
C6	25SVPF56M	25	56	30	2800	12	280
	20SVPF120M	20	120	25	3200	12	480
	16SVPF180M	16	180	22	3300	12	576
	50SVPF18M	50	18	35	2700	12	180
	35SVPF39M	35	39	30	2800	12	273
 E7	25SVPF82M	25	82	28	3000	12	410
[/	25SVPF100M	25	100	24	3200	12	500
	20SVPF180M	20	180	25	3200	12	720
	16SVPF270M	16	270	22	3300	12	864
	50SVPF39M	50	39	25	3800	12	390
	35SVPF82M	35	82	20	4000	12	574
E12	25SVPF180M	25	180	16	4650	12	900
	20SVPF390M	20	390	14	4950	12	1560
	16SVPF560M	16	560	14	4950	12	1792
	50SVPF68M	50	68	20	4300	12	680
	35SVPF120M	35	120	18	4400	12	840
F12	25SVPF330M	25	330	14	5000	12	1650
	20SVPF560M	20	560	12	5400	12	2240
	16SVPF1000M	16	1000	12	5400	12	3200

Recommended land pattern dimension of PWB



Size code	а	b	С
В6	1.4	7.4	1.6
C6	2.1	9.1	1.6
E7	2.8	11.1	1.9
E12	2.8	11.1	1.9
F12	4.3	13.1	1.9

(unit:mm)

Frequency coefficient for ripple current

Frequency	120Hz ≤ f < 1kHz	1kHz ≤ f < 10kHz	10kHz ≤ f < 100kHz	100kHz ≤ f ≤ 500kHz
Coefficient	0.05	0.3	0.7	1

OS-CON

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Image of case size

Products list

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SVPF SVPE SVPS SVPD SVPC SVPB SVQP SVP

> SEPF SEPC SEQP

Radial lead type Catalog Deletion and EOL series

> POSCAP POSCAP Line-up

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Marking data Recommended soldering condition **Technical** Fundamental structure Characteristics

Reliability TPU TPH

TPG Surface mount type TPSF TPB/TPC TPL:TPLF TΑ TV

Catalog Deletion and EOL models

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Panasonic:

 20SVPF120M
 16SVPF270M
 25SVPF56M
 50SVPF18M
 25SVPF27MX
 20SVPF56MX
 35SVPF39M
 20SVPF180M

 25SVPF82M
 50SVPF10M
 20SVPF560M
 35SVPF22M
 16SVPF560M
 16SVPF180M
 16SVPF82M
 35SVPF120M

 25SVPF180M
 50SVPF68M
 25SVPF47M
 35SVPF82M
 25SVPF100M
 20SVPF390M
 50SVPF39M
 16SVPF1000M

 25SVPF330M