

Surface  
mount type

## SXV Series

NEW



RoHS directive/Halogen-free compliant  
Super high voltage (100V)  
Endurance: 105°C 5,000h

## Specifications

Items	Condition	Specifications	
Rated voltage (V)	—	63	100
Surge voltage (V)	Room temperature	72.5	115.0
Category temperature range (°C)	—	-55 to +105	
Capacitance tolerance (%)	120Hz/20°C	M: ±20	
Dissipation Factor (DF)	120Hz/20°C	Please see the attached characteristics list	
Leakage current*1	Rated voltage applied, after 2 minutes	Please see the attached characteristics list	
Equivalent series resistance (ESR)	100kHz to 300kHz/20°C	Please see the attached characteristics list	
Characteristics of impedance ratio at high temp. and low temp.	Based the value at 100kHz, +20°C	-55°C Z/Z <sub>20°C</sub>	0.75 to 1.25
		+105°C Z/Z <sub>20°C</sub>	0.75 to 1.25
Endurance	105°C, 5,000h, Rated voltage applied	ΔC/C	Within ±20% of the initial value
		DF	Within 1.5 times of the initial limit
		ESR	Within 1.5 times of the initial limit
		LC	Within the initial limit
		ΔC/C	Within ±20% of the initial value
Damp heat (Steady state)	60°C, 90 to 95%RH, 1,000h, No applied voltage	DF	Within 1.5 times of the initial limit
		ESR	Within 1.5 times of the initial limit
		LC	Within the initial limit (after voltage processing)
		ΔC/C	Within ±10% of the initial value
		DF	Within 1.3 times of the initial limit
Resistance to soldering heat*2	QPS (230°C X 75s)	ESR	Within 1.3 times of the initial limit
		LC	Within the initial limit (after voltage processing)
		ΔC/C	Within ±10% of the initial value
		DF	Within 1.3 times of the initial limit

\*1 In case of some problems for measured values, measure after applying rated voltage.

\*2 Please refer to page 25 for reflow soldering conditions.

## Marking and dimensions

Polarity marking (Cathode)	Case No. Series (SXV)	Rated capacitance	Rated voltage	Dimensions (unit : mm)						
				φD	L	W	H	C	R	P
227 SXV 33 63				8.0	11.9	8.3	8.3	9.0	0.8~1.1	3.2

## Size list

RV : Rated voltage

RV	63	100
15		E12
33	E12	

## Recommended land pattern dimension of PWB

Size code	a	b	c
E12	2.8	11.1	1.9

## SXV series characteristics list

Size code	Part number	Rated voltage (V)	Rated capacitance (μF)	ESR(mΩ) (max) 100kHz to 300kHz/20°C	Rated ripple current 100kHz (mA rms) at 105°C	DF (% max)	Leakage current (μA) (max) After 2 minutes
E12	63SXV33M	63	33	25	2950	12	104
	100SXV15M	100	15	40	2350	12	75

## 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