

ZVE Series — ESD Suppression SMD Varistors

Description

ZVE surface mounted varistors are designed to suppress ESD events, including those specified in IEC1000-4-2 of other standards used for Electromagnetic Compliance testing. The ZVE Series is typically applied to protect integrated circuits and other components at the circuit board level operating at 18V_{DC} or less.

Fabrication method, design and materials of these devices result in low capacitance characteristics suitable for high-frequency attenuation/low-pass filter circuit functions, providing suppression and filtering in a single device



Features

- AC operating voltage (V_{rms}) from 0V to 14V
- DC operating voltage (V_{dc}) from 0V to 18V
- Rated for ESD (IEC-1000-4-2)
- Fast response time
- Bi-directional, low clamping voltages
- 4 model sizes available 0603, 0805, 1206, 1210
- Characterized for low inductance and capacitance
- +125°C continuous operating temperature
- Dimensional and weight savings on PC board
- AgPd end terminations
- No plastic coating guarantees better flammability rating
- Available in tape and reel of automatic pick and place

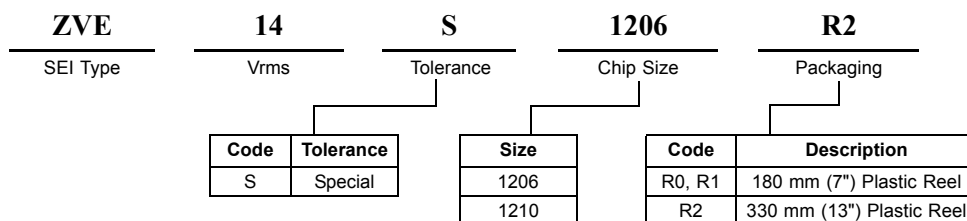
Applications

- Used for port and I/O interface protection in mobile, communication, computer/EDP products, medical products, hand held /portable devices and industrial equipment
- Suppression of ESD events such as specified in IEC1000-4-2, or, MIL-STD 883C, Method 3015.7 for Electromagnetic, Compliance
- Protection of components and circuits sensitive to ESD, transients occurring on power, control and signaling lines

General Technical Data

Operating Temperature	-55°C to +125°C	In accordance with CECC 42 000
Storage Temperature Range	-55°C to +150°C	
Threshold Voltage Temperature Coefficient	<-0.05%/°C	
Response Time	< 1 ns	

How to Order



ZVE Series — ESD Suppression SMD Varistors

Standard Packaging Options/ Quantities

Series	Voltage Range (Vrms)	Chip Size					
ZVE	14	1206			1210		
		R0	R1	R2	R0	R1	R2
		180mm	180mm	330mm	180mm	180mm	330mm
		7"	7"	13"	7"	7"	13"
		1,000	4,000	15,000	1,000	1,500	6,000

Device Ratings and Dimensions

Part Number	V _{RMS} (volts)	V _{DC} (volts)	V _B (volts)	V _C (volts)	I _C (amps)	W _{MAX} (joules)	P _{MAX} (watts)	I _p (amps)	C _{TYP} (pF)	L _{TYP} (nH)	L (mm)	L (mm)	t _{MAX} (mm)
ZVE 14 S 1206	14	18	22 - 28	50	2	0.10	0.004	30	200	< 1.8	3.20 ± 0.30	1.60 ± 0.20	1.2
ZVE 14 S 1210	14	18	22 - 28	50	2	0.10	0.004	30	400	< 3.5	3.20 ± 0.30	2.50 ± 0.25	1.2