

ESD Suppressor Array

Type: **EZAEGCA**



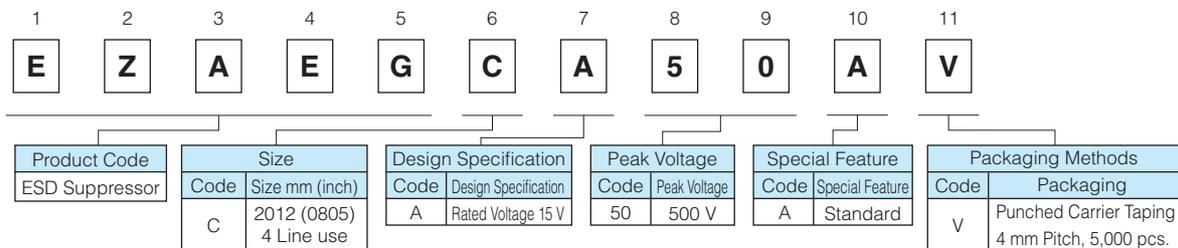
Features

- 4 ESD suppressors in one package
- ESD protection of high-speed data lines
- Low capacitance (0.25 pF)
- Good ESD suppression characteristics
- Good ESD withstanding
- RoHS compliant

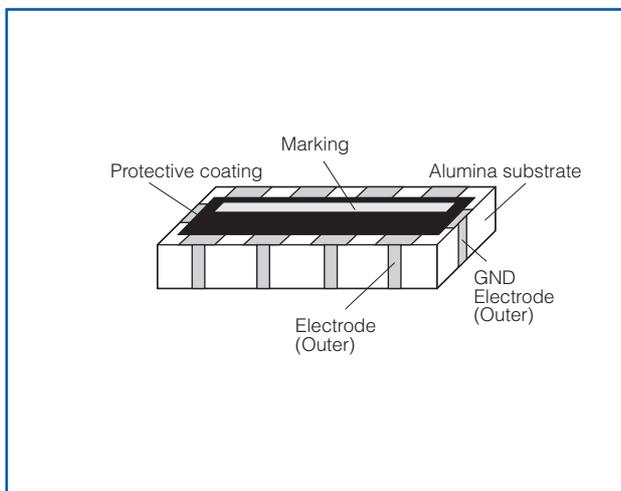
Recommended Applications

- AV equipment (LCD-TV, DVD/Blu-ray drives), Information equipment (PCs, HDD,)
- ESD suppression of high-speed differential data line such as USB3.0, HDMI, Display Port

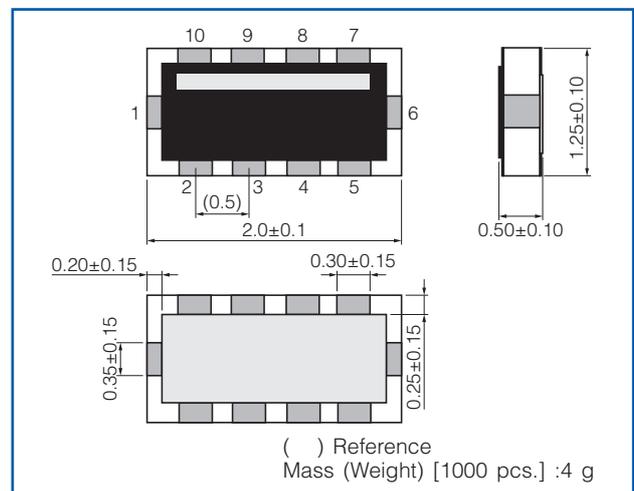
Explanation of Part Numbers



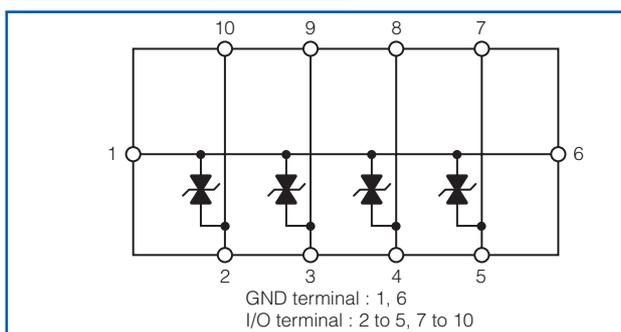
Construction



Dimensions in mm (not to scale)



Circuit Configuration



Ratings

Part Number (inch size)	Capacitance ⁽¹⁾	Rated Voltage ⁽²⁾	Rated Current ⁽³⁾	Category Temperature Range
EZAEGCA50AV (0805)	0.25 ^{+0.05} _{-0.10} pF	15 V max.	100 mA max.	-55 to +125 °C

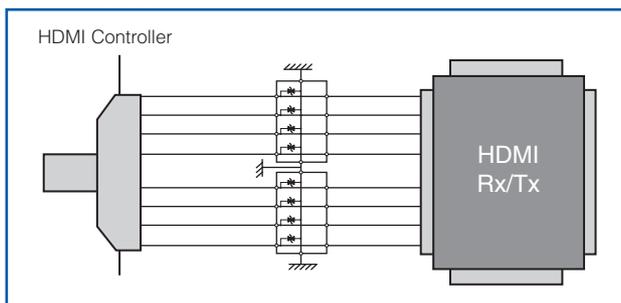
- (1) Capacitance = The capacitance value shall be measured under the conditions specified below.
Frequency : 1 MHz±10 %, Voltage : 1 Vrms±0.2 Vrms, Temperature : 25 °C±2 °C
- (2) Rated voltage between I/O terminal and GND.
- (3) Rated current between input terminal and output terminal.

Performance

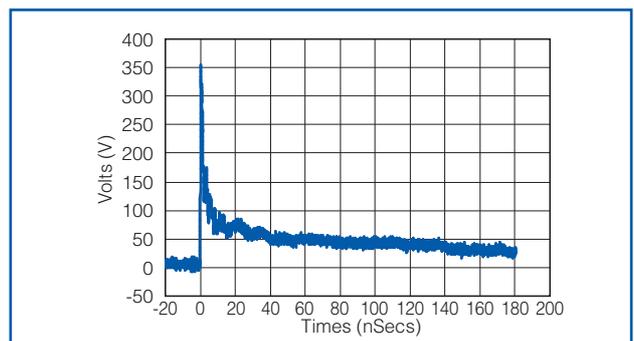
Test Item	Performance Requirements	Test Conditions
Peak Voltage	500 V max.	IEC61000-4-2, contact discharge 8 kV, Peak voltage value
Clamping Voltage	100 V max.	IEC61000-4-2, contact discharge 8 kV, voltage at 30 ns after initiation of pulse
Leakage Current	1 µA max.	Current at Rated voltage (DC 15 V)
ESD withstanding	Leakage current 10 µA max.	IEC61000-4-2, contact discharge 8 kV, +/- 10 times
Rapid Change of Temperature	Leakage current 10 µA max.	-55 °C (30 min.) / +125 °C (30 min.), 100 cycles
Load Life in Humidity	Leakage current 10 µA max.	60 °C, 90% to 95%RH, Rated voltage, 1000 h
Endurance at 85 °C	Leakage current 10 µA max.	85 °C, Rated voltage, 1000 h
Resistance to Soldering Heat	Leakage current 10 µA max.	270 °C, 10 s

Typical Circuits Requiring Protection

● HDMI circuit

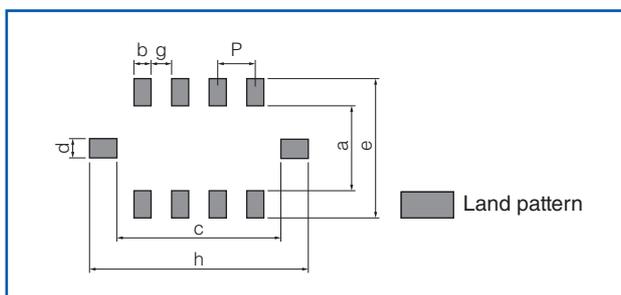


ESD Suppression Voltage Waveform



Recommended Land Pattern

Recommended land pattern design for ESD Suppressor Array is shown below.



	a	b	c	d
Dimensions (mm)	0.75	0.25	1.70	0.35
	e	h	g	P
Dimensions (mm)	1.85	2.60	0.25	0.50

■ As for Packaging Methods, Soldering Conditions and Safety Precautions,

Please see Data Files

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