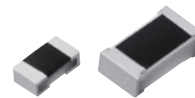


## ESD Suppressor

Type: **EZAEG**

EZAEG2A, 3A



### Features

- ESD protection of high-speed data lines
- Low capacitance 0.04 pF: 0603(0201) size  
0.05 pF: 1005(0402) size
- Good ESD suppression characteristics
- Good ESD withstanding
- RoHS compliant

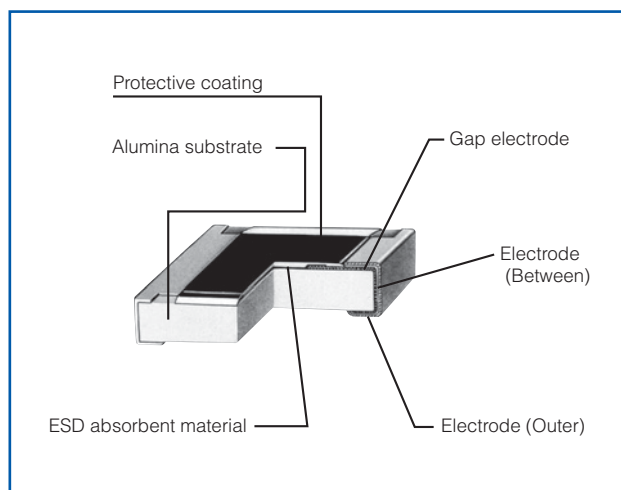
### Recommended Applications

- Smart phones, Mobile phones, RF Modules, NFC and GPS
- ESD suppression of high-speed differential data line such as Antenna circuit, HDMI, SATA, USB, Display Port

### Explanation of Part Numbers

1	2	3	4	5	6	7	8	9	10	11
E	Z	A	E	G	2	A	5	0	A	X
Product Code ESD Suppressor	Size		Design Specification		Peak Voltage		Special Feature		Packaging Methods	
	Code	Size mm (inch)	Code	Design Specification	Code	Peak Voltage	Code	Special Feature	Code	Packaging
	2	1005 (0402)	A	Rated Voltage 30 V	50	500 V	A	Standard	X	Pressed Carrier Taping 2 mm Pitch, 10,000 pcs.
	3	1608 (0603)							V	Punched Carrier Taping 4 mm Pitch, 5,000 pcs.
										Part No.
										EZAEG2A
										EZAEG3A

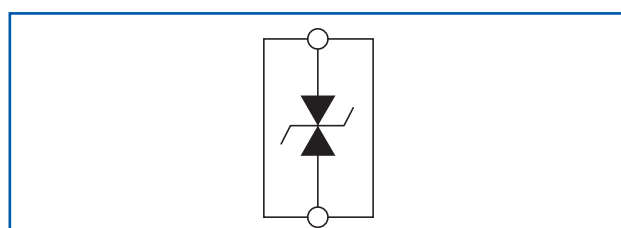
### Construction



### Dimensions in mm (not to scale)

Part No. (inch size)	Dimensions (mm)					Mass (Weight) [g/1000 pcs.]
	L	W	a	b	t	
EZAEG2A (0402)	1.00±0.10	0.50±0.05	0.20±0.10	0.25±0.10	0.38±0.05	0.6
EZAEG3A (0603)	1.60±0.15	0.80±0.15	0.30±0.20	0.30±0.20	0.50±0.10	2.2

### Circuit Configuration



## Ratings

Part Number (inch size)	Capacitance <sup>(1)</sup>	Peak Voltage <sup>(2)</sup>	Clamping Voltage <sup>(3)</sup>	Rated Voltage	Category Temperature Range
EZAEG2A50AX (0402)	0.05 <sup>+0.05</sup> <sub>-0.04</sub> pF	500 V max. (350 V typ.)	100 V max.	30 V max	-55 to +125 °C
EZAEG3A50AV (0603)	0.10 <sup>+0.10</sup> <sub>-0.08</sub> pF				

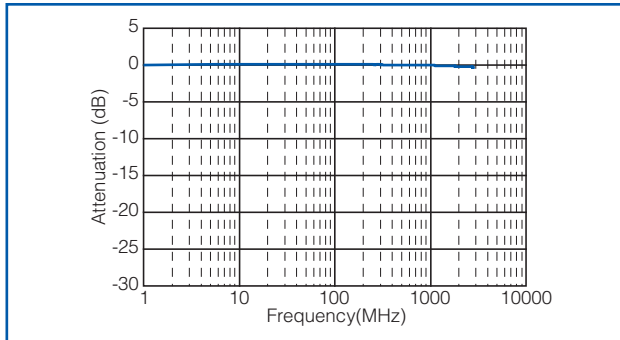
(1) Capacitance = The capacitance value shall be measured under the conditions specified below.

Frequency : 1 MHz±10 %, Voltage : 1 Vrms±0.2 Vrms, Temperature : 25 °C±2 °C

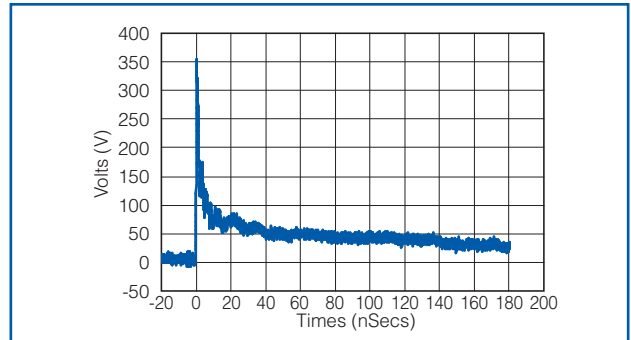
(2) Peak Voltage = The peak voltage value shall be measured under the following conditions. ESD test conditions : IEC61000-4-2, 8 kV contact discharge

(3) Clamping Voltage = The clamping voltage value shall be measured at 30 ns after initiation of pulse and measured under the conditions specified below.  
ESD test conditions : IEC61000-4-2, 8 kV contact discharge

## Frequency Characteristics

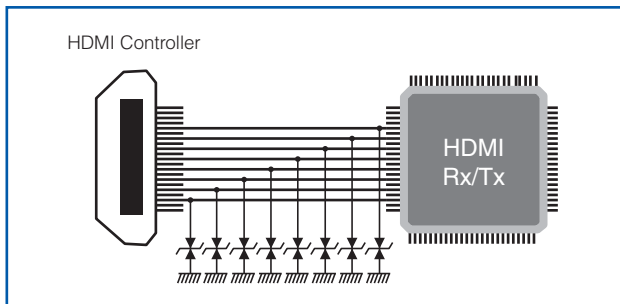


## ESD Suppression Voltage Waveform

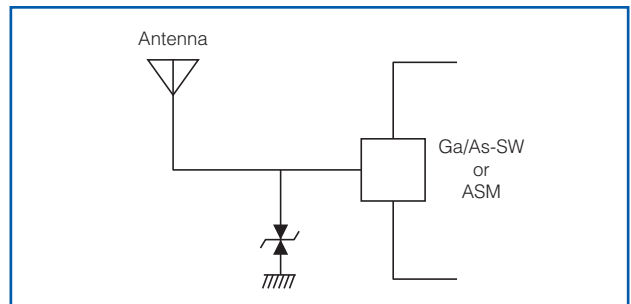


## Typical Circuits Requiring Protection

### ● HDMI circuit

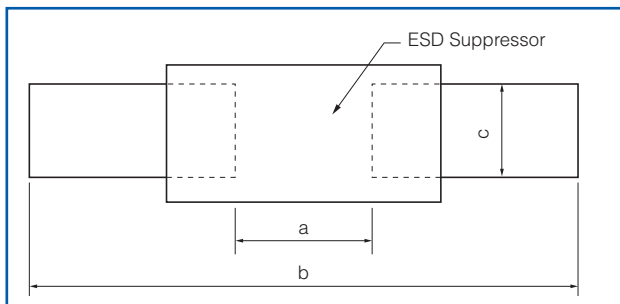


### ● Antenna circuit



## Recommended Land Pattern

Recommended land pattern design for ESD Suppressor is shown below.



Part Number (inch size)	Dimensions (mm)		
	a	b	c
EZAEG2A (0402)	0.5 to 0.6	1.4 to 1.6	0.4 to 0.6
EZAEG3A (0603)	0.7 to 0.9	2.0 to 2.2	0.8 to 1.0

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

Please see Data Files