# ESD Suppressor

Type: **EZAEG**

EZAEG1A

This series is not a recommended product.
Not recommended for new design.

## Features

- ESD protection of high-speed data lines
- Low capacitance
- Good ESD suppression characteristics
- Good ESD withstanding
- RoHS compliant

## Recommended Applications

- High-Speed Data Lines
  (HDMI, Serial ATA, USB, IEEE1394, Display Port)
- Antenna Circuitry and RF Modules (Cellular Phones)

## Explanation of Part Numbers

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|
| E | Z | A | E | G | 1 | A | 5 | 0 | A | C |

| Product Code |
|---|
| ESD Suppressor |

| Size | |
|---|---|
| Code | Size (inch) |
| 1 | 0603 (0201) |

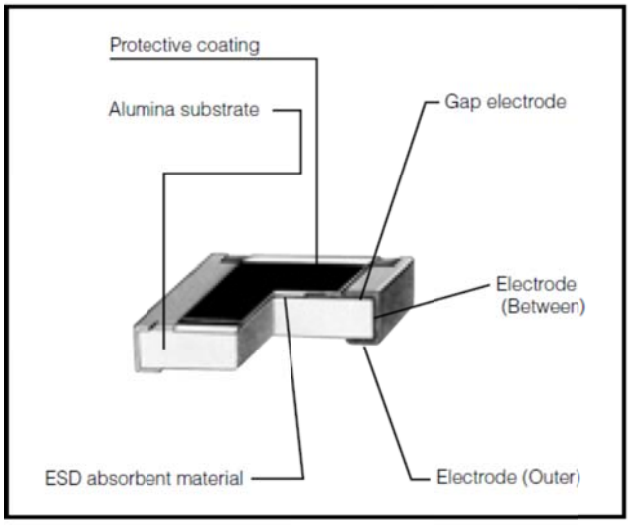
| Design Specification | |
|---|---|
| Code | Design Specification |
| A | Rated Voltage 30 V |

| Peak Voltage | |
|---|---|
| Code | Peak Voltage |
| 50 | 500 V |

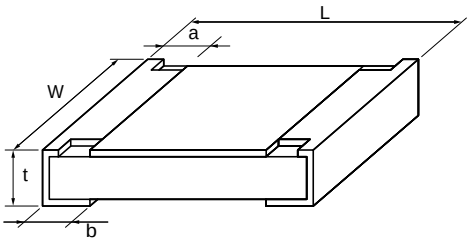
| Special Feature | |
|---|---|
| Code | Special Feature |
| A | Standard |

| Packaging Methods | | |
|---|---|---|
| Code | Packaging | Type |
| C | Pressed Carrier Taping 2 mm Pitch, 15,000 pcs. | EZAEG1A |

## Construction

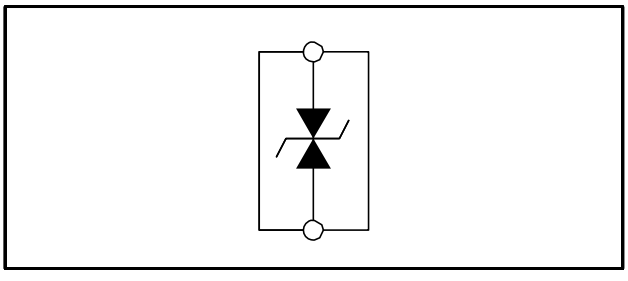



## Dimensions in mm (not to scale)




| Type (inch size) | Dimensions (mm) | | | | | Mass (Weight) [g/1000 pcs.] |
|---|---|---|---|---|---|---|
| | L | W | a | b | t | |
| EZAEG1A (0201) | $0.60^{\pm 0.03}$ | $0.30^{\pm 0.03}$ | $0.15^{\pm 0.10}$ | $0.15^{\pm 0.10}$ | $0.23^{\pm 0.03}$ | 0.12 |

## Circuit Configuration



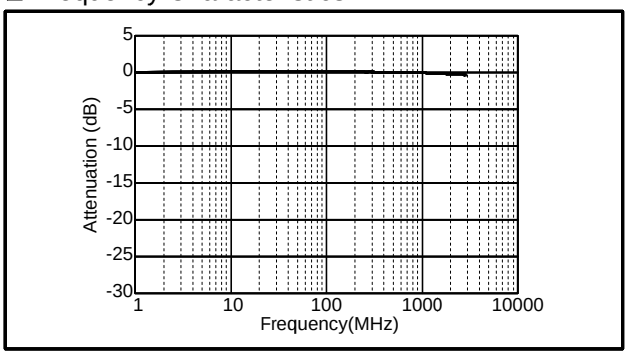
Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.
Should a safety concern arise regarding this product, please be sure to contact us immediately.

## ■ Ratings

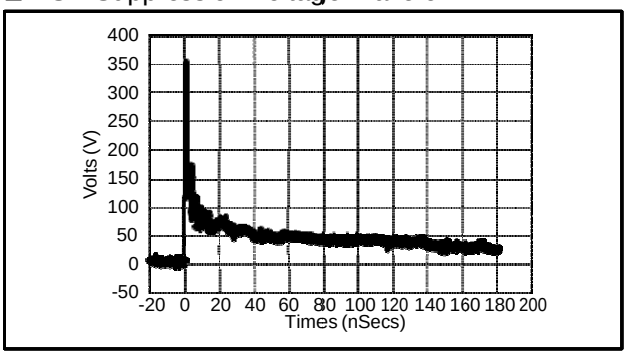
| Type (inch size) | Capacitance (1) | Peak Voltage (2) | Clamping Voltage (3) | Rated Voltage | Category Temperature Range |
|---|---|---|---|---|---|
| EZAEG1A (0201) | $0.04^{+0.04}_{-0.03}$ pF | 500 V max. (350 V typ.) | 100 V max. | 30 V max | –55 to +125 °C |

(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) 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

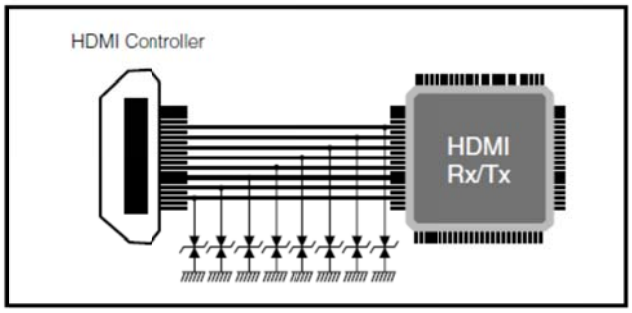



## ■ ESD Suppression Voltage Waveform

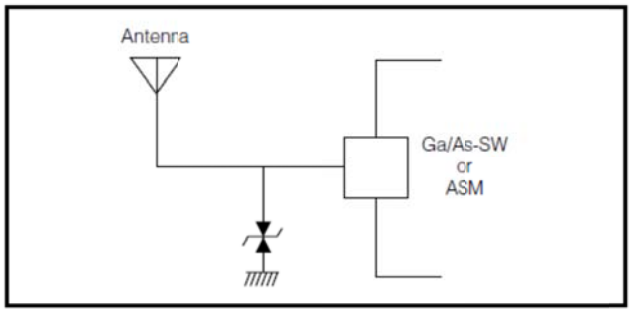



## ■ Typical Circuits Requiring Protection

● HDMI circuit

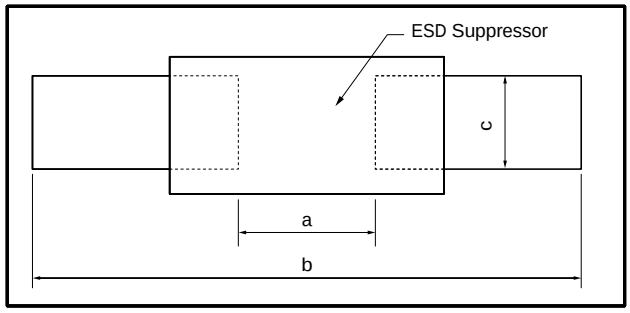



● Antenna circuit




## ■ Recommended Land Pattern

Recommended land pattern design for ESD Suppressor is shown below.




| Type (inch size) | Dimensions (mm) | | |
|---|---|---|---|
| | a | b | c |
| EZAEG1A (0201) | 0.3 to 0.4 | 0.8 to 0.9 | 0.25 to 0.35 |

## ■ Packaging Methods, Soldering Conditions and Safety Precautions

Please see Data Files

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