

ESD Suppressor, High Withstanding Type

Type: **EZAEG**

EZAEG3W



Features

- Excellent ESD withstanding (Conforms with automotive ESD standards (ISO10605, air discharge 25 kV))
- Low capacitance 0.10 pF : 1608 (0603) size
- High rated voltage (DC 50 V) contributes to reduce the risk of communication error
- AEC-Q200 qualified
- RoHS compliant

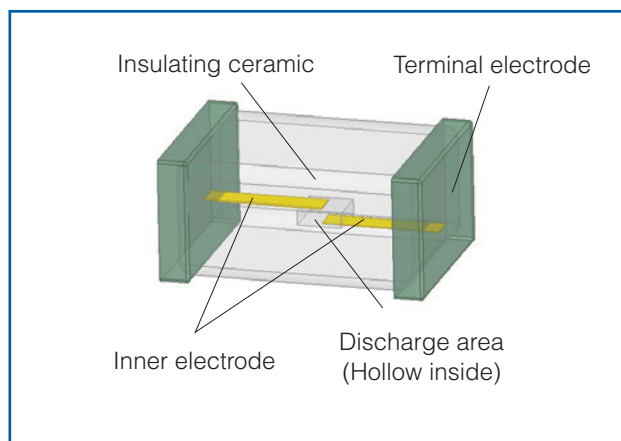
Recommended Applications

- High speed data line for automotive (CAN, Ethernet, USB, LVDS)
- Automotive Antenna
- Amusement equipment

Explanation of Part Numbers

1	2	3	4	5	6	7	8	9	10	11	
E	Z	A	E	G	3	W	1	1	A	V	
Product Code	Size		Design Specification		Peak Voltage		Special Feature		Packaging Methods		
ESD Suppressor	Code	Size mm (inch)	Code	Design Specification	Code	Peak Voltage	Code	Special Feature	Code	Packaging	Part No.
	3	1608 (0603)	W	High with standing type Rated voltage 50 V	11	1000 V	A	Standard	V	Punched Carrier Taping 4 mm Pitch, 4,000 pcs.	EZAEG3W

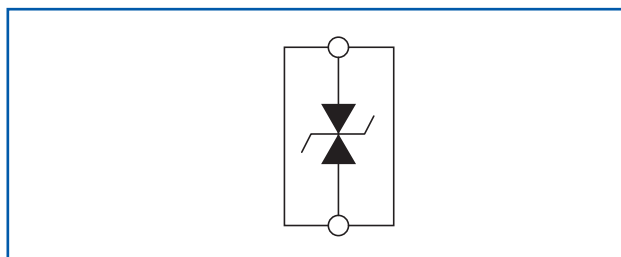
Construction



Dimensions in mm (not to scale)

Part No. (inch size)	Dimensions (mm)				Mass (Weight) [g/1000 pcs.]
	L	W	T	a	
EZAEG3W (0603)	1.60±0.15	0.80±0.15	0.80±0.15	0.30±0.20	3.8

Circuit Configuration



Ratings

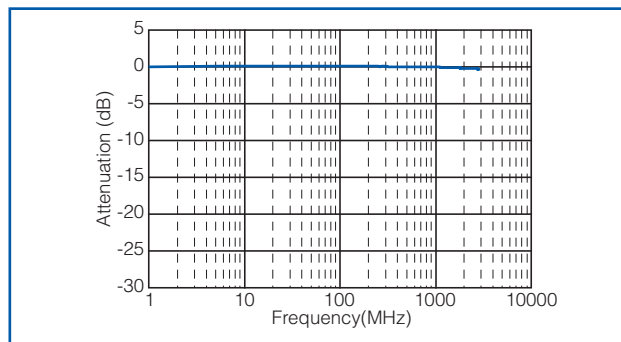
Part Number (inch size)	Capacitance ⁽¹⁾	Rated Voltage	Category Temperature Range
EZAEG3W11AV (0603)	0.10 ^{+0.10} _{-0.08} pF	50 V max.	-55 to +125 °C

(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

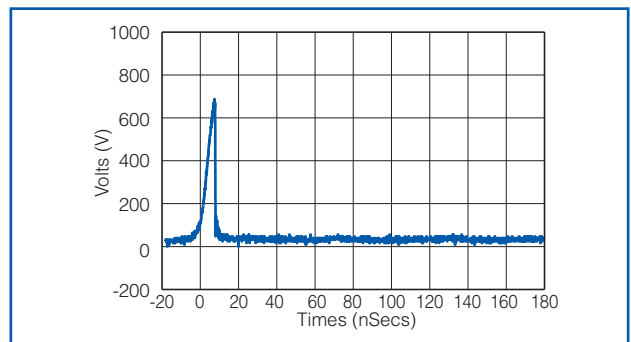
Performance

Test Item	Performance Requirements	Test Conditions
Peak Voltage	1000 V max.	ISO10605, air discharge 15 kV, Peak voltage value
Leakage Current	1 µA max.	Current at Rated voltage (DC 50 V)
ESD withstanding	Leakage current 10 µA max.	ISO10605, air discharge 25 kV, +/- 50 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.	85 °C, 85%RH, Rated voltage, 1000 h
Endurance at 125 °C	Leakage current 10 µA max.	125 °C, Rated voltage, 1000 h
Resistance to Soldering Heat	Leakage current 10 µA max.	270 °C, 10 s

Frequency Characteristics

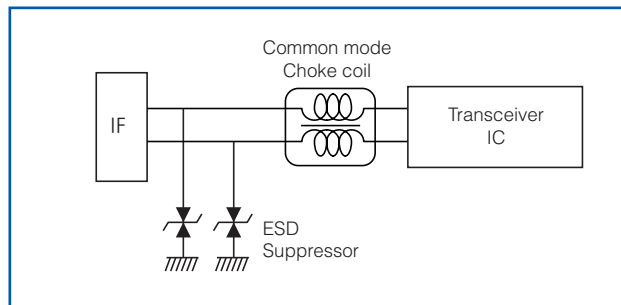


ESD Suppression Voltage Waveform

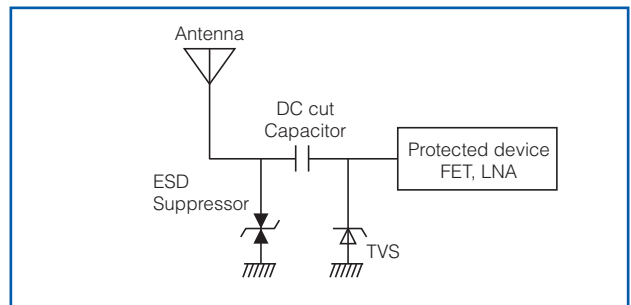


Typical Circuits Requiring Protection

● Automotive network (CAN, Ethernet)

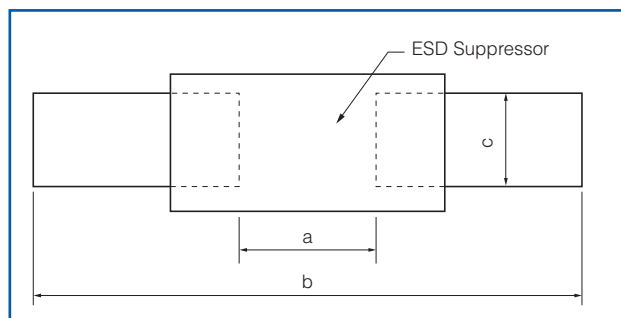


● Automotive antenna



Recommended Land Pattern

Recommended land pattern design for ESD Suppressor is shown below.



Part Number (inch size)	Dimensions (mm)		
	a	b	c
EZAEG3W (0603)	0.8 to 1.0	2.0 to 2.6	0.8 to 1.0

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

Please see Data Files

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