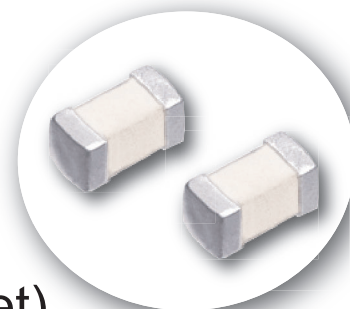


High withstand ESD Suppressors

Contributing to ESD countermeasures for automotive high-speed data lines (Ethernet)



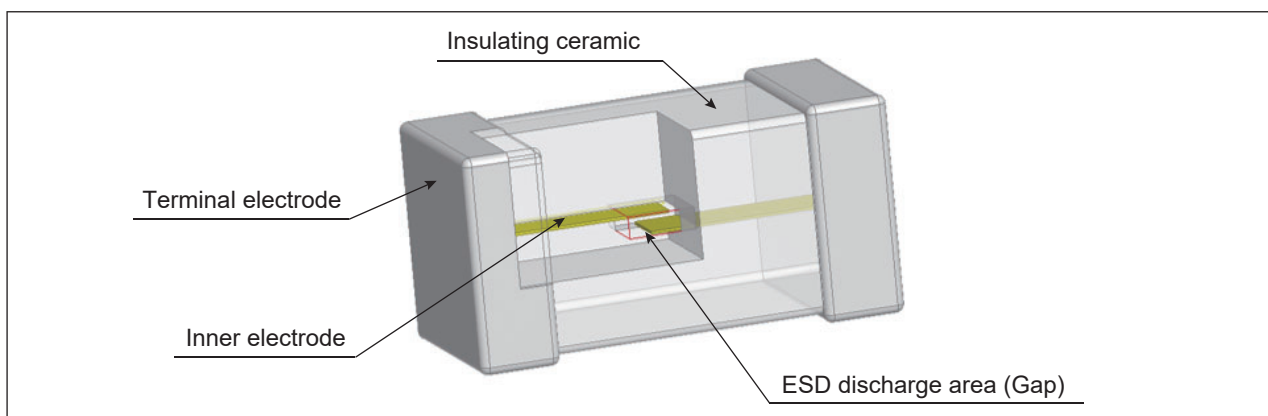
Product summary

- ESD countermeasure components using electrode gap discharge in product cavities

Features

- High ESD resistance (Compliant with automotive standard ISO10605 Air 25 kV)
The structure that discharges the gas in the cavity achieves high ESD resistance even in the high-voltage range.
- Low capacitance (C : 0.1 pF)
Maintains signal quality even at high-speed transmissions of 1 Gbps or more
- High noise immunity
High voltage rating of 50 V prevents communication errors due to ESD suppressor malfunction due to BCI noise, etc.
- High temperature (125 °C) capable
Ensures AEC-Q200 Qualified Reliability

Structure



Standard

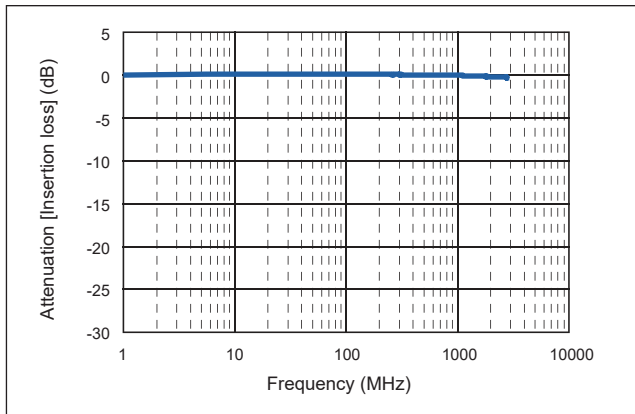
Part Number	Size (mm) (inch)	Capacitance*1	Peak voltage*2	Leakage current*3	Rated voltage	Category temp. range
EZAEG3W11AV	1608 (1.6x0.8) (0603)	0.10 ^{+0.10} / _{-0.08} pF	1000 V max. (700 V typ.)	1 μA	50 V max.	-55 to +125°C

*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

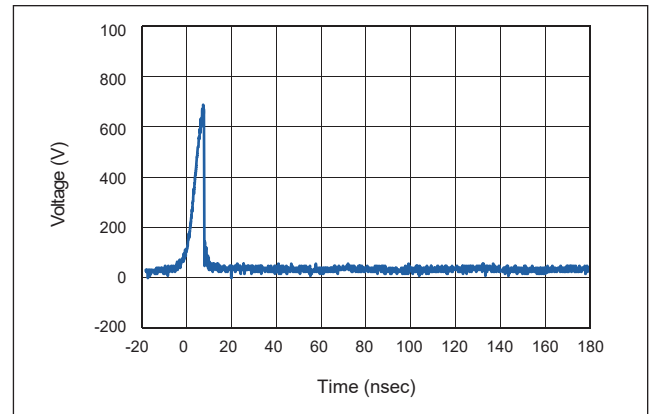
*2: Peak Voltage = The peak voltage value shall be measured under the following conditions.
ESD test conditions : ISO10605(330 pF-2 kΩ), 15 kV air discharge.

*3: Leakage current = Leakage current value shall be measured at rated voltage (DC50 V).

Frequency characteristic

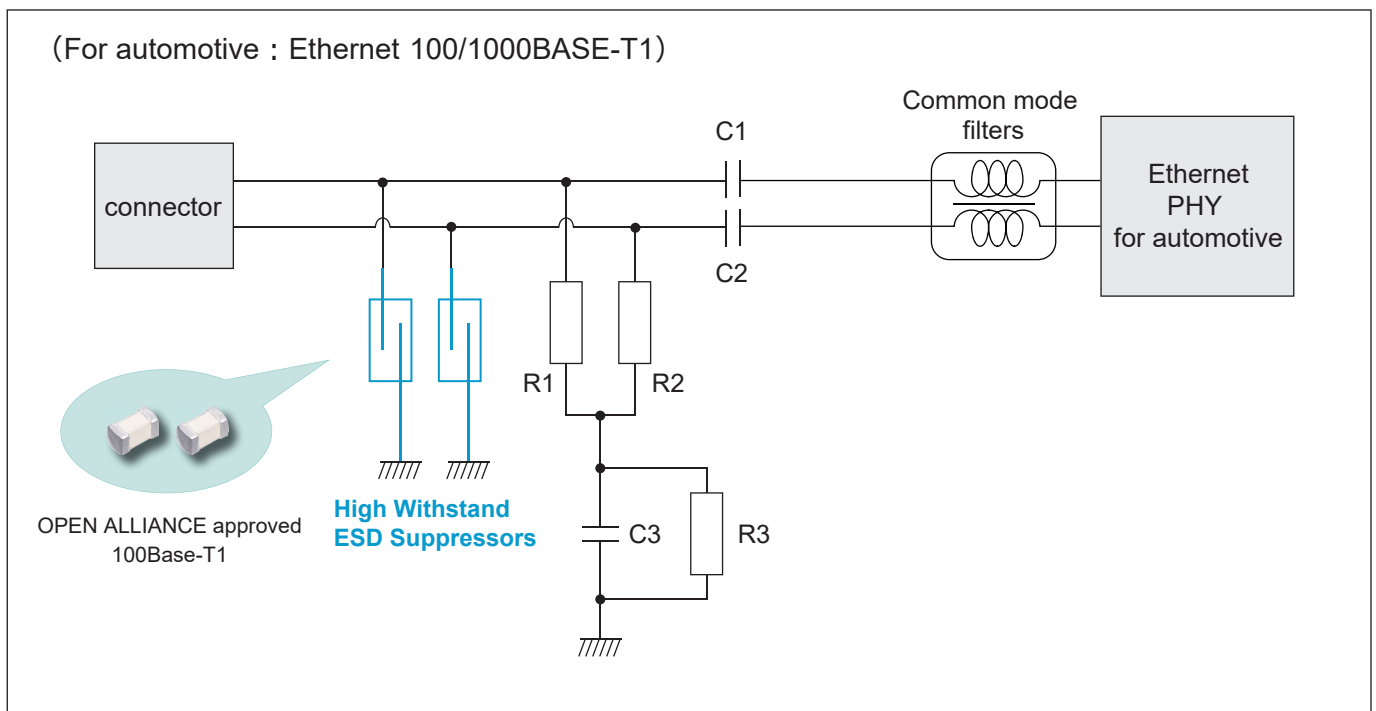


ESD suppression effect



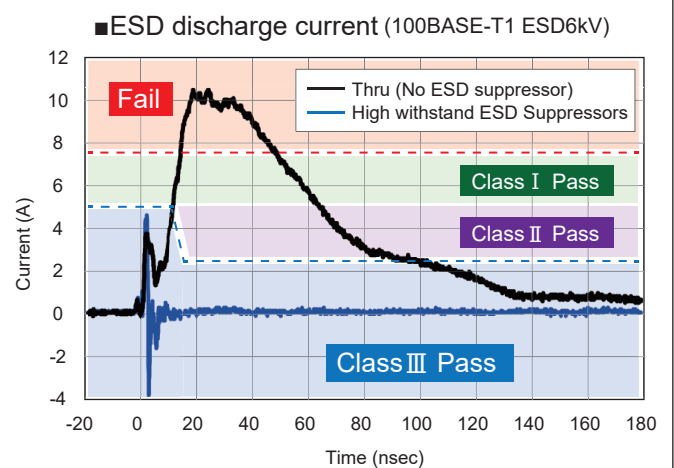
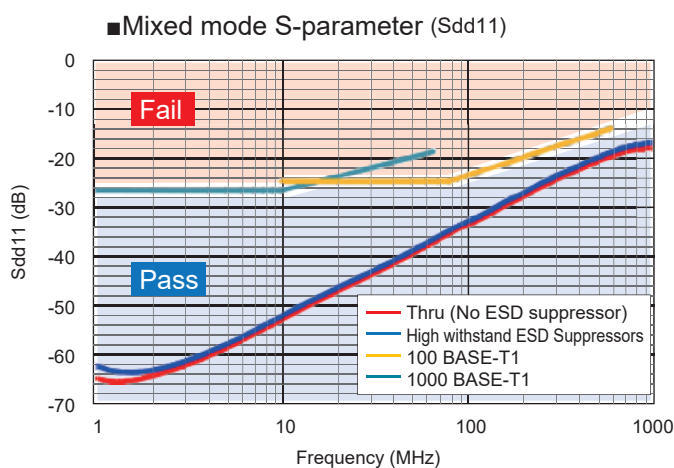
Applicable circuit

(For automotive : Ethernet 100/1000BASE-T1)



Evaluation results of high-capacity ESD Suppressors in open alliance required tests

(100/1000BASE-T1)



※Class III > Class II > Class I : Equivalent to the highest Class III