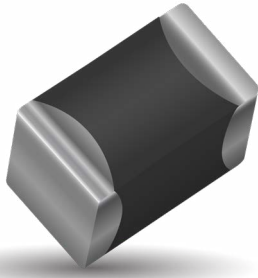


AntennaGuard Automotive Series

0402/0603 Low Capacitance Automotive Varistors

ESD Protection for Automotive Circuits Sensitive to Capacitance



GENERAL DESCRIPTION

KYOCERA AVX 0402/0603 Automotive AntennaGuard products are an ultra low capacitance extension to the Automotive TransGuard® Series and are intended for use in RF and other capacitance sensitive circuits.

These low capacitance values have low insertion loss, low leakage current and unsurpassed reliability compared to diode options. These advantages combined with size advantages and bi-directional protection make the AntennaGuard the right choice for automotive applications including RF circuits, sensors, high-speed signal transmission lines, etc...



GENERAL CHARACTERISTICS

- Operating Temperature: -55°C to +125°C
- Working Voltage: ≤18Vdc
- Case Size: 0402, 0603

FEATURES

- AEC Q200 Qualified
- 25kV ESD rating
- Meet 27.5Vdc Jump Start requirements
- Multi-strike capability
- Sub 1nS response to ESD strike

APPLICATIONS

- RF Circuit
- Sensors
- Antennas
- Data lines
- Keyless entry
- Capacitance sensitive applications

HOW TO ORDER

| VC | AS | 06 | AG | 18 | 3R0 | Y | A | T | 1 | A |
|----------------------|----------------------------------|--|-------------|--|--|--|-----------------------|--|--|--|
| Varistor Chip | Series AS = Automotive | Case Size 04 = 0402 06 = 0603 | Type | Working Voltage 18 = 18.0VDC | Capacitance 2R0 = 2pF 3R0 = 3pF 120 = 12pF | Non-Std Cap Tol C = ±0.25pF (2R0) Y = Max (for 3pF) Y = +4/-2pF (for 12pF) | Not Applicable | Termination T = Ni/Sn Plated | Reel Size 1 = 7" reel 3 = 13" reel W = 7" reel (0402 only) | Reel Qty A = 4K or 10K pcs (i.e.: 1A = 4,000 3A = 10,000 WA = 10,000) |

ELECTRICAL CHARACTERISTICS

| Part Number | VW (DC) | VW (AC) | IL | Cap | Cap Tolerance | VJump | Case Size |
|---------------------|---------|---------|-----|-----|---------------|-------|-----------|
| VCAS04AG183R0YAT_ _ | ≤ 18 | ≤ 14 | 0.1 | 3 | Max | 27.5 | 0402 |
| VCAS06AG182R0CAT_ _ | ≤ 18 | ≤ 14 | 0.1 | 2 | ±0.25pF | 27.5 | 0603 |
| VCAS06AG183R0YAT_ _ | ≤ 18 | ≤ 14 | 0.1 | 3 | Max | 27.5 | 0603 |
| VCAS06AG18120YAT_ _ | ≤ 18 | ≤ 14 | 0.1 | 12 | +4, -2pF | 27.5 | 0603 |

Termination Finish Code
Packaging Code

V_w (DC)
V_w (AC)
I_L
Cap
V_{Jump}

DC Working Voltage (V)
AC Working Voltage (V)
Maximum Leakage Current at the Working Voltage (µA)
Maximum Capacitance (pF) @ 1 MHz and 0.5 Vrms; VC06AG18120YAT capacitance tolerance: +4, -2pF
Jump Start (V)

AntennaGuard Automotive Series

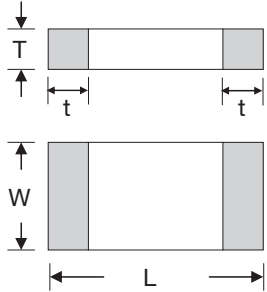
0402/0603 Low Capacitance Automotive Varistors

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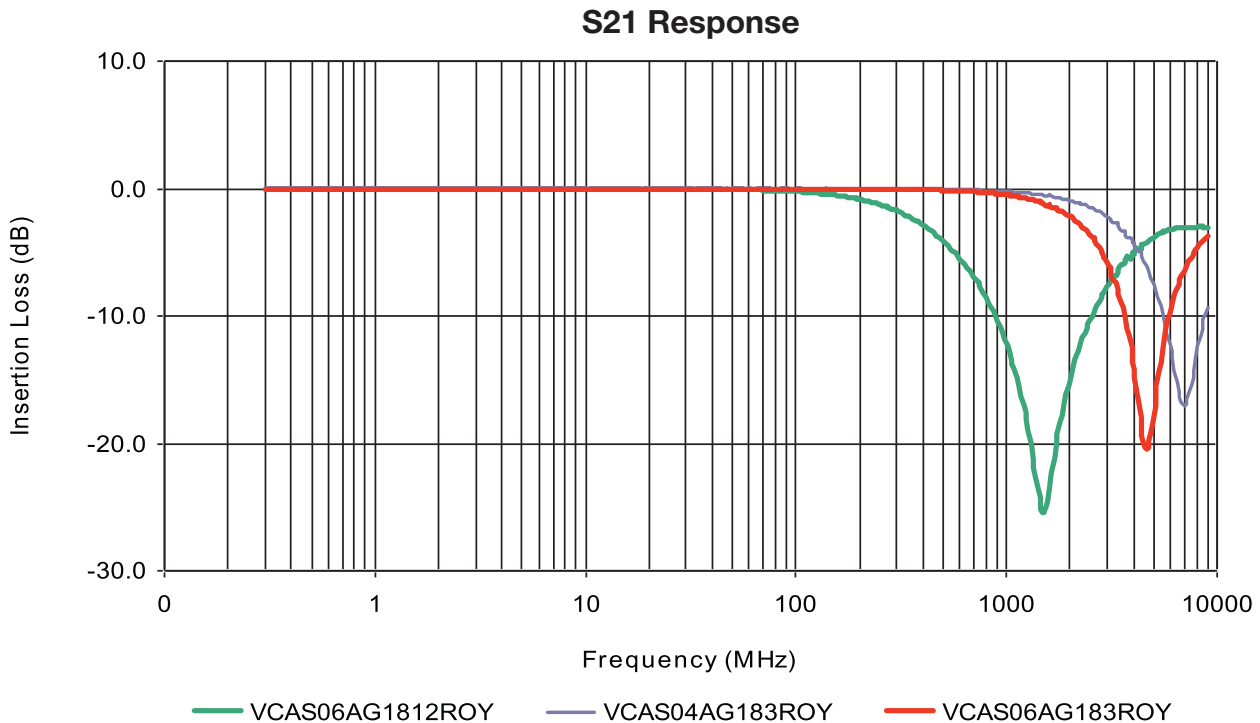
PHYSICAL DIMENSIONS:

mm (inches)

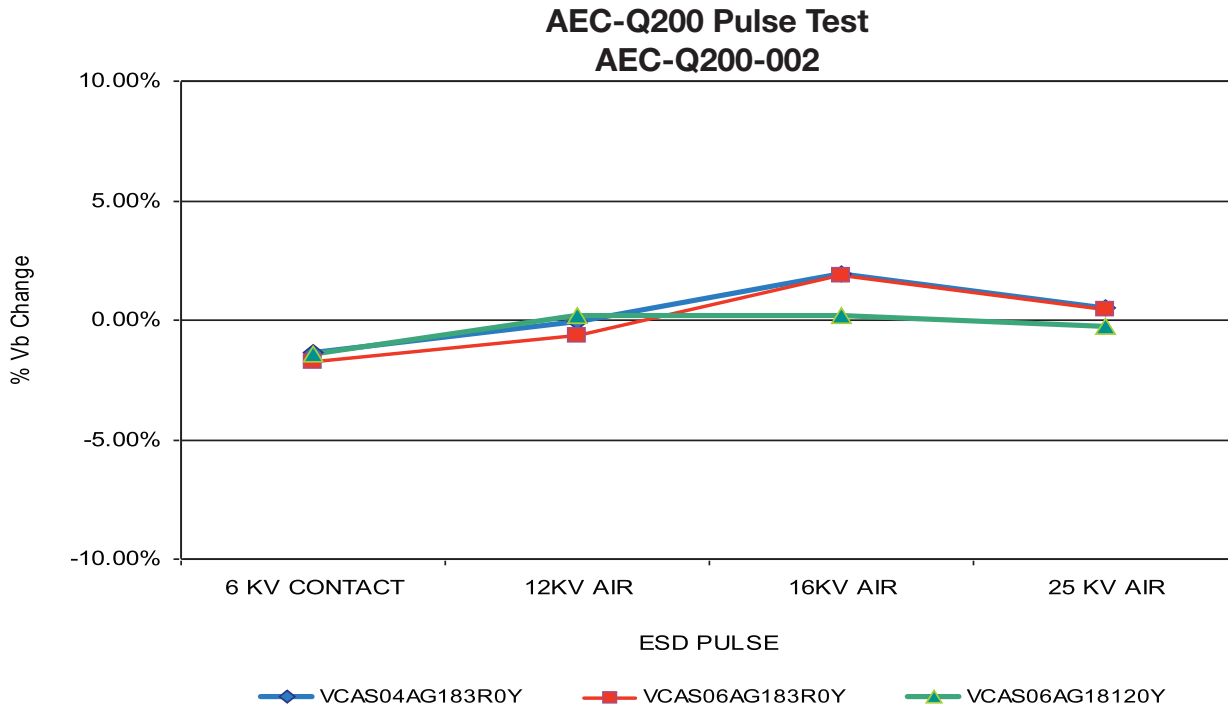


| Size (EIA) | Length (L) | Width (W) | Max Thickness (T) | Land Length (t) |
|------------|----------------------------|----------------------------|-------------------|----------------------------|
| 0402 | 1.00±0.10 (0.040±0.004) | 0.50±0.10 (0.020±0.004) | 0.60 (0.024) | 0.25±0.15 (0.010±0.006) |
| 0603 | 1.60±0.15 (0.063±0.006) | 0.80±0.15 (0.031±0.006) | 0.90 (0.035) | 0.35±0.15 (0.014±0.006) |

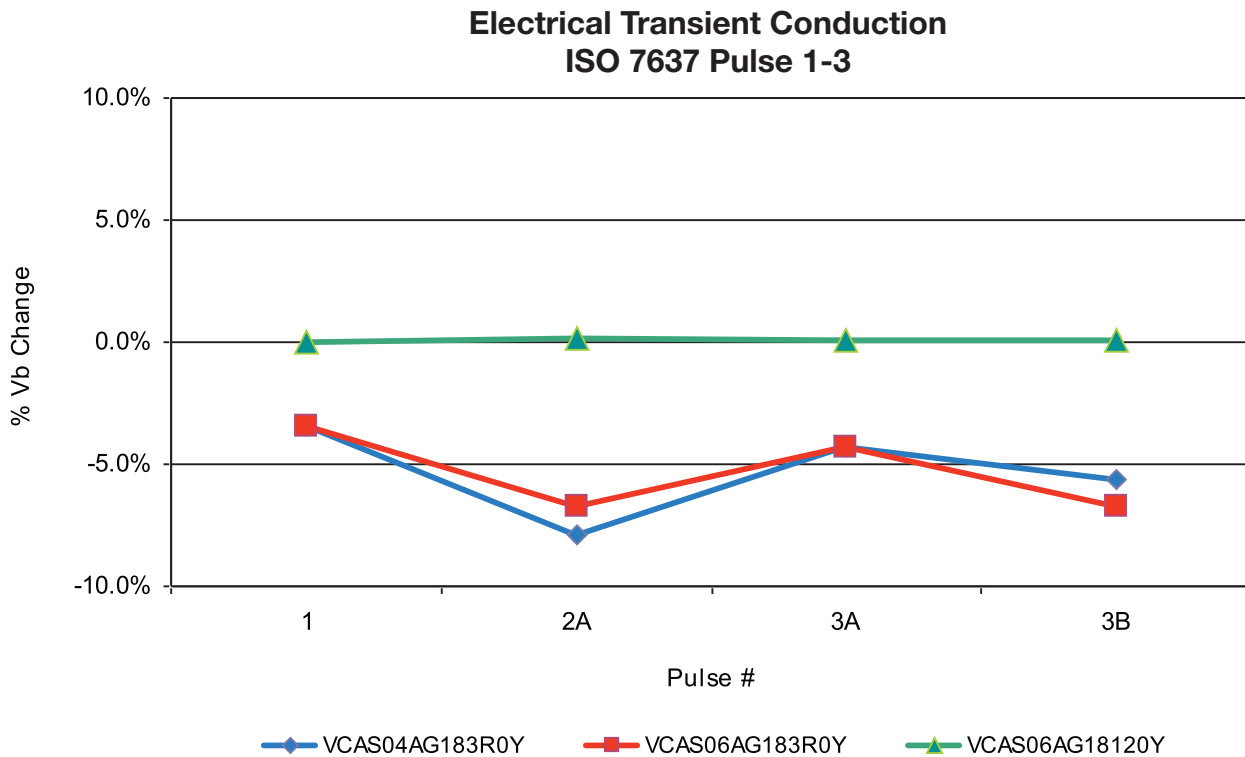
S21 TRANSMISSION CHARACTERISTICS



ESD CHARACTERISTICS



ELECTRICAL TRANSIENT CONDUCTION



单击下面可查看定价，库存，交付和生命周期等信息

[>>AVX](#)