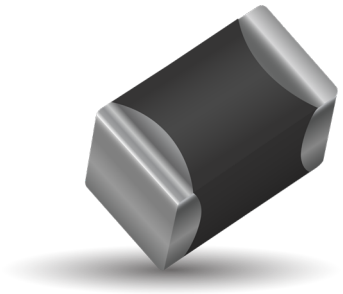
AntennaGuard Automotive Series

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...

RoHS COMPLIANT

GENERAL CHARACTERISTICS

- Operting Teperature: -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)

ELECTRIAL 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

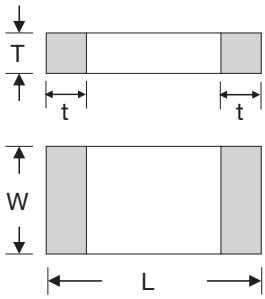
└ Termination Finish Code
└ Packaging Code

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

The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

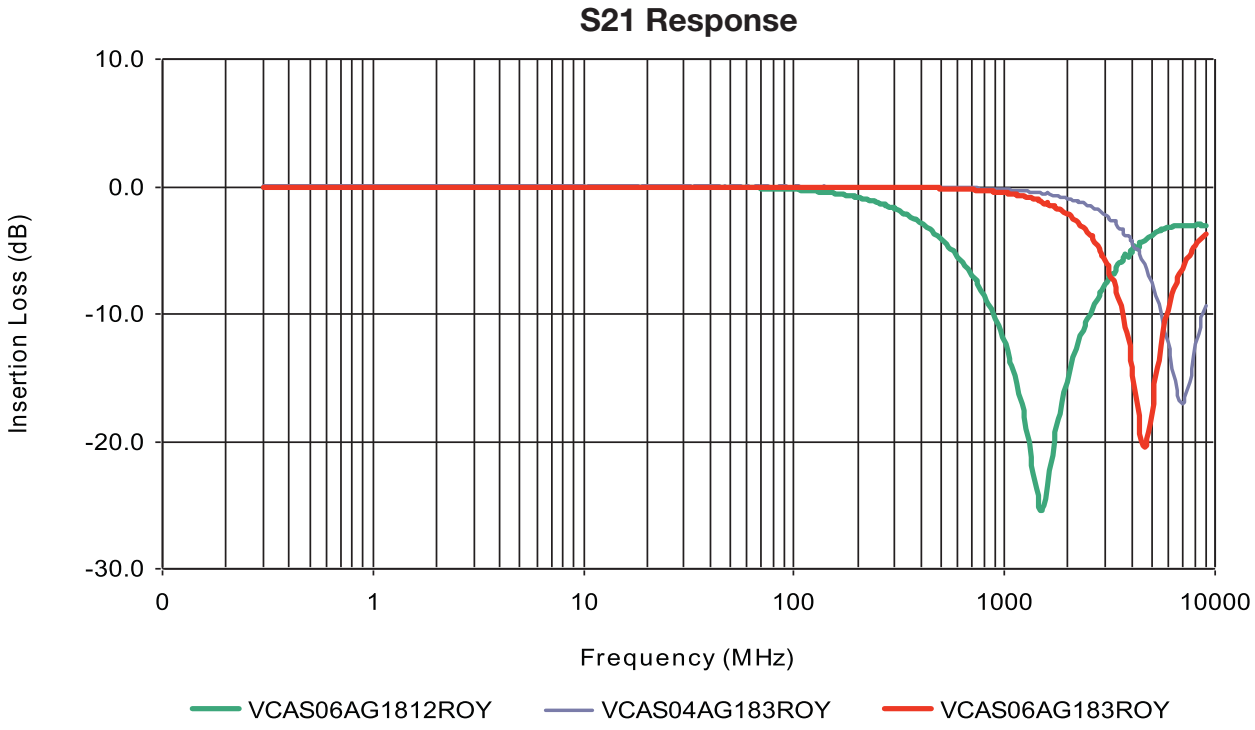
PHYSICAL DIMENSIONS:

mm (inches)

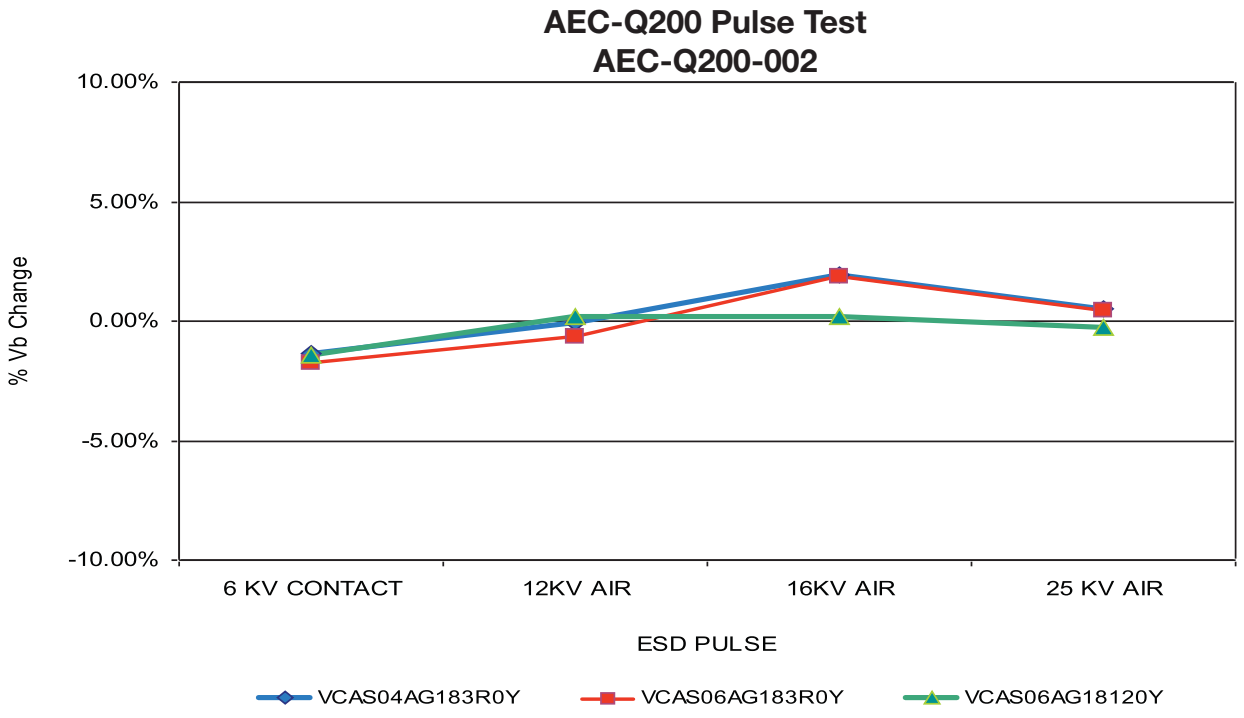


Size (EIA)	Length (L)	Width (W)	Max Thickness (T)	Land Length (t)
0402	1.00±0.10 (0.040±0.004)	0.50±0.10 (0.020±0.004)	0.60 (0.024)	0.25±0.15 (0.010±0.006)
0603	1.60±0.15 (0.063±0.006)	0.80±0.15 (0.031±0.006)	0.90 (0.035)	0.35±0.15 (0.014±0.006)

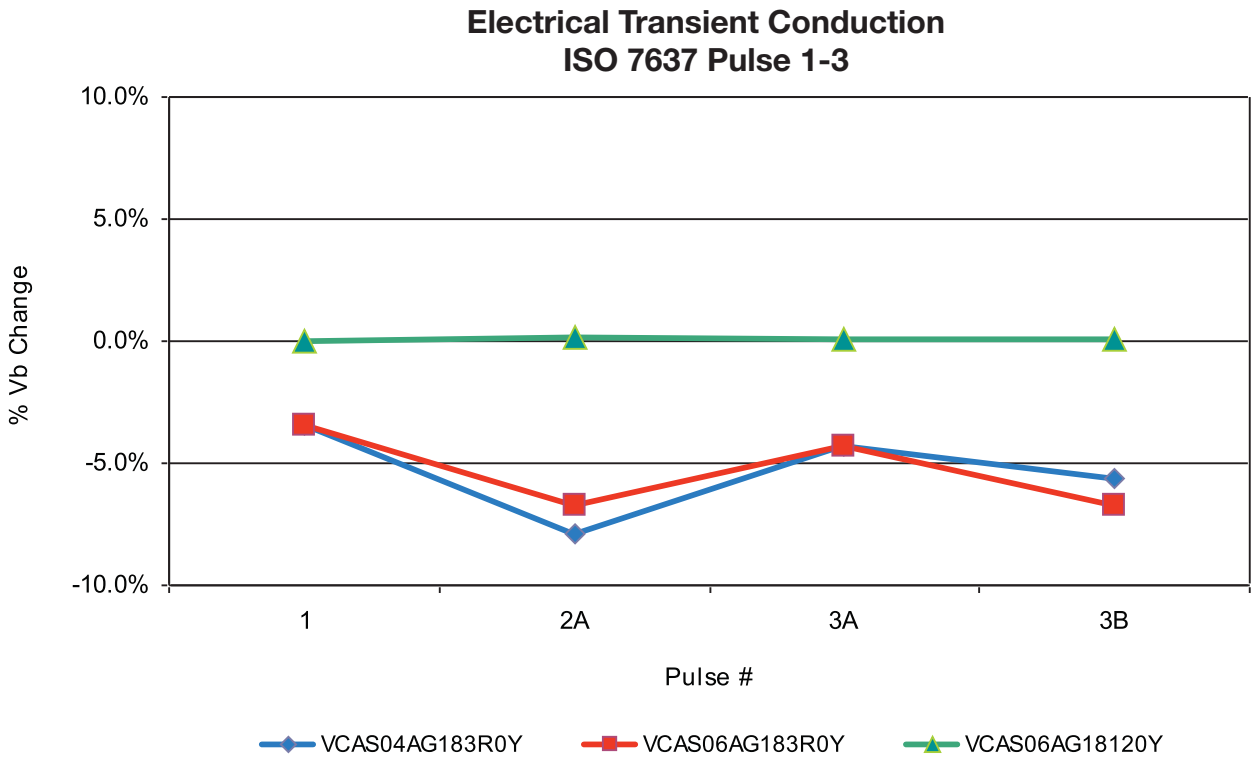
S21 TRANSMISSION CHARACTERISTICS



ESD CHARACTERISTICS



ELECTRICAL TRANSIENT CONDUCTION



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