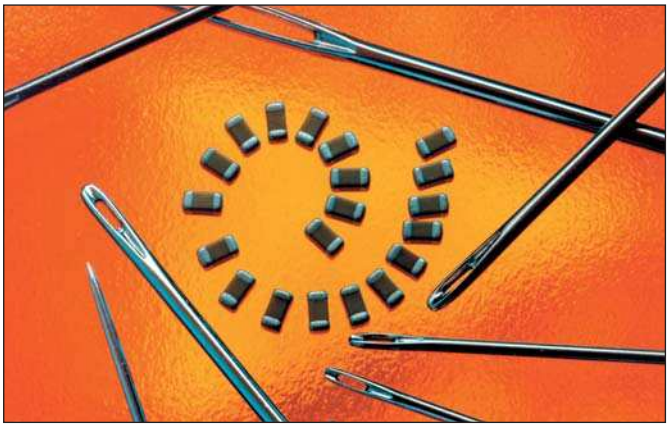
StaticGuard Automotive Series

Multilayer Varistors for Automotive Applications



GENERAL DESCRIPTION

The StaticGuard Automotive Series are low capacitance versions of the TransGuard and are designed for general ESD protection of CMOS, Bi-Polar, and SiGe based systems. The low capacitance makes these products suitable for use in high speed data transmission lines.

FEATURES

- AEC Q200 Qualified
- ISO 7637 Pulse 1-3 capability
- Meet 27.5Vdc Jump Start requirements
- Multi-strike capability
- Sub 1nS response to ESD strike

HOW TO ORDER

VC	AS	06	LC	18	X	500	R	P
Varistor Chip	**Series** AS = Automotive	**Case Size** 04 = 0402 06 = 0603 08 = 0805	**Low Cap Design**	**Working Voltage** 18 = 18.0VDC	**Energy Rating** A = 0.10 Joules V = 0.02 Joules X = 0.05 Joules	**Clamping Voltage** 150 = 18V 200 = 22V 300 = 32V 400 = 42V 500 = 50V	**Packaging** (PCS/REEL) D = 1,000 R = 4,000 T = 10,000 W = 0402 10000	**Termination** P = Ni/S

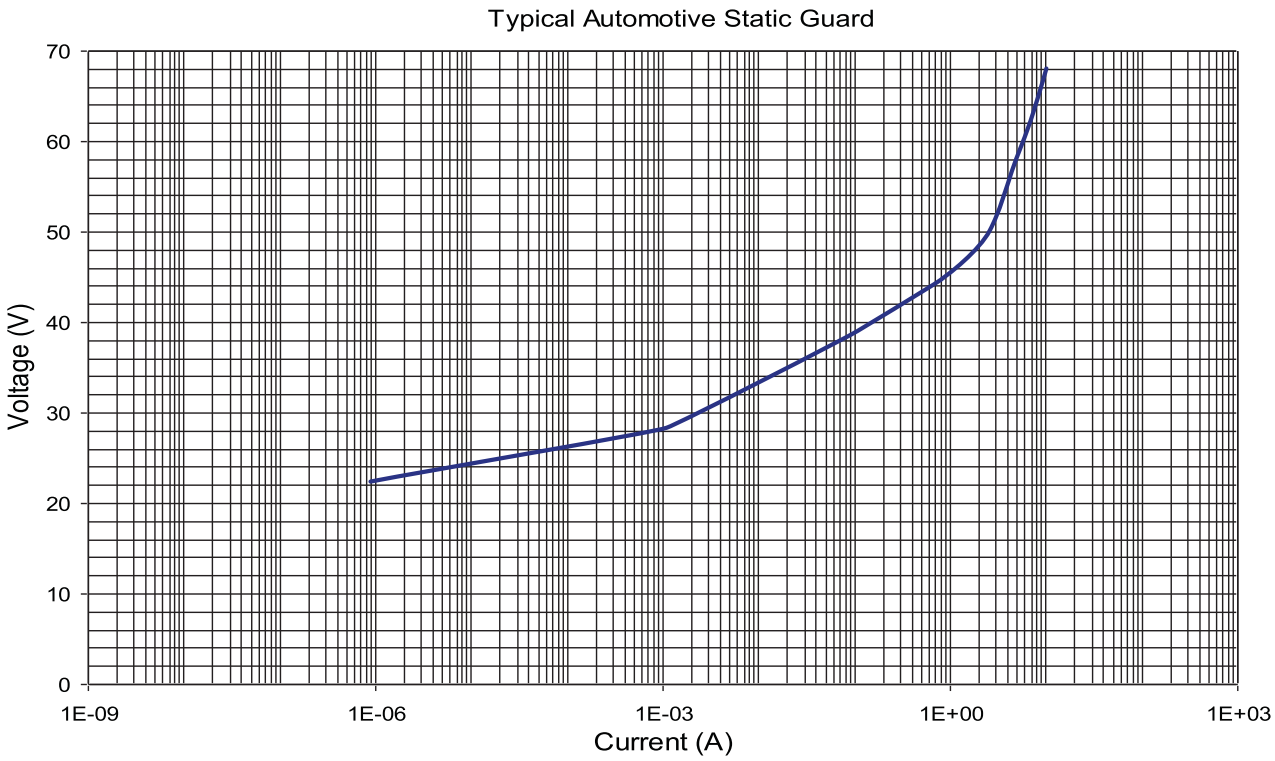
RoHS COMPLIANT

ELECTRIAL CHARACTERISTICS

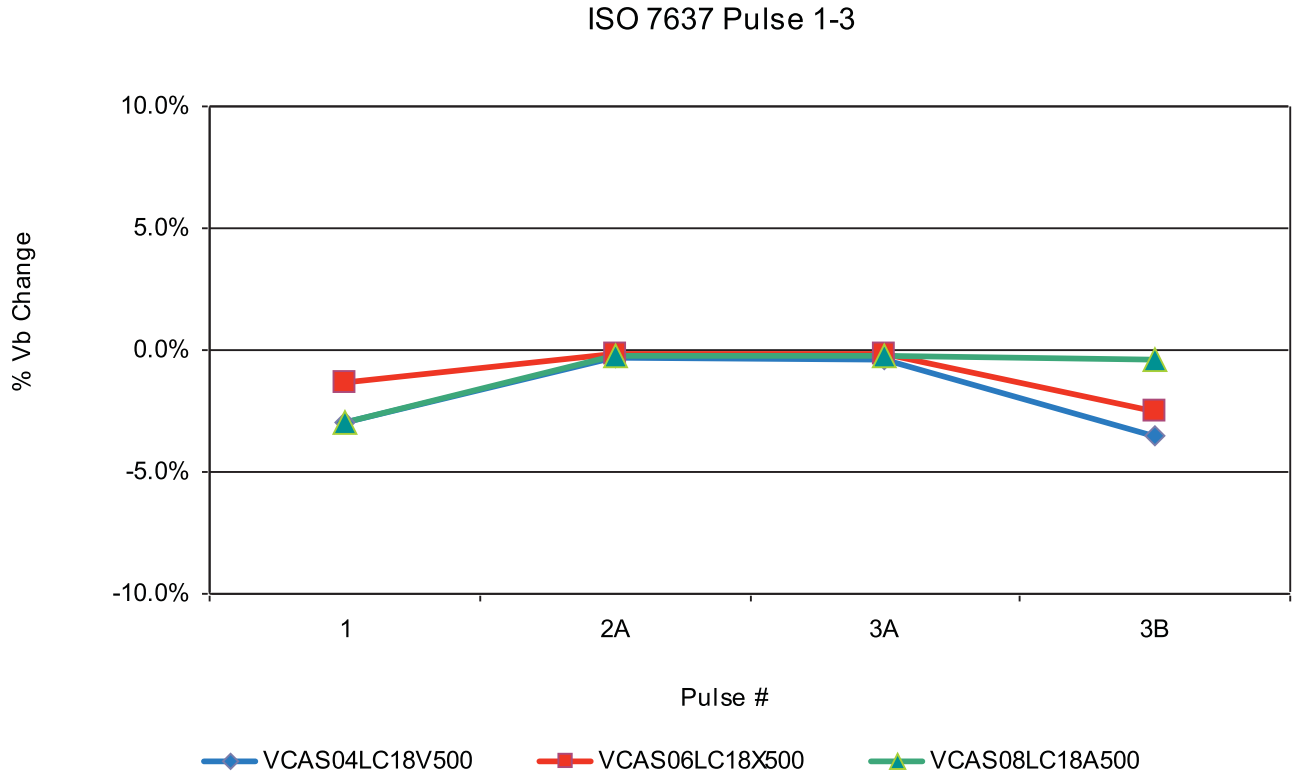
AVX Part Number	Working Voltage (DC)	Working Voltage (AC)	Clamping Voltage	Test Current For V_c	Maximum Leakage Current	Transient Energy Rating	Peak Current Rating	Typical Cap	Case Size	Power Dissipation
VCAS04LC18V500	≤18.0	≤14.0	50	1	10	0.02	15	40	0402	0.0004
VCAS06LC18X500	≤18.0	≤14.0	50	1	10	0.05	30	50	0603	0.001
VCAS08LC18A500	≤18.0	≤14.0	50	1	10	0.10	30	80	0805	0.002

V_W(DC)	DC Working Voltage (V)
V_W(AC)	AC Working Voltage (V)
V_C	Clamping Voltage (V @ I_{VC})
I_{VC}	Test Current for V_C (A, 8x20µS)
I_L	Maximum Leakage Current at the Working Voltage (µA)
E_T	Transient Energy Rating (J, 10x1000µS)
I_P	Peak Current Rating (A, 8x20µS)
Cap	Typical Capacitance (pF) @ frequency specified and 0.5 V_{RMS}

VOLTAGE/CURRENT CHARACTERISTICS

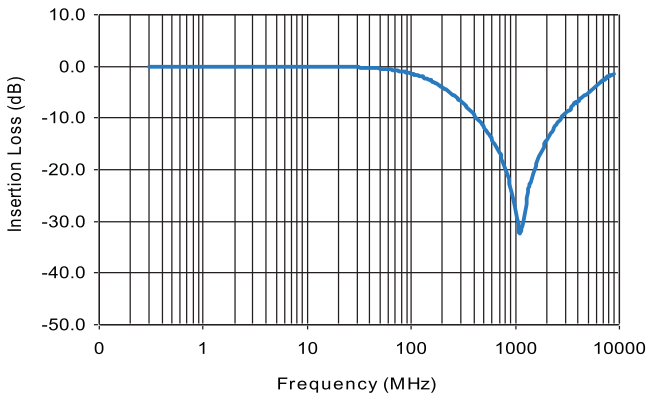


ELECTRICAL TRANSIENT CONDUCTION

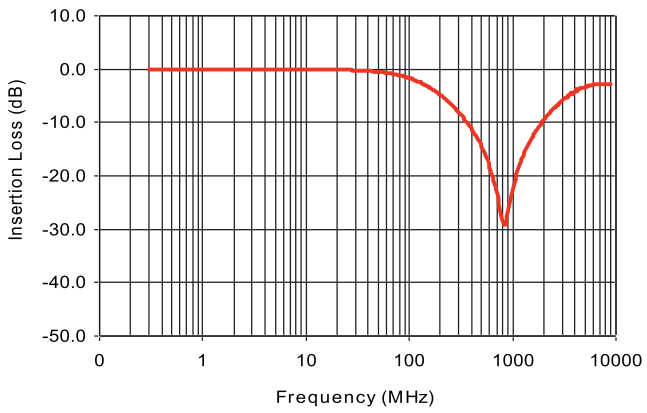


VOLTAGE/CURRENT CHARACTERISTICS

VCAS04LC18V500



VCAS06LC18X500



VCAS08LC18A500