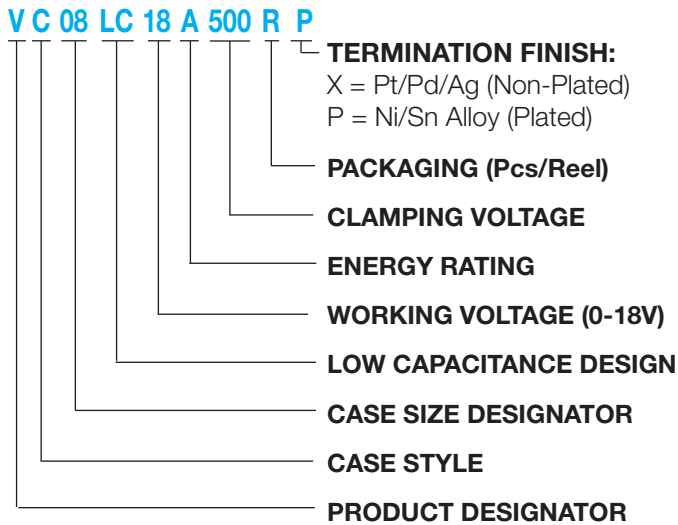


GENERAL INFORMATION

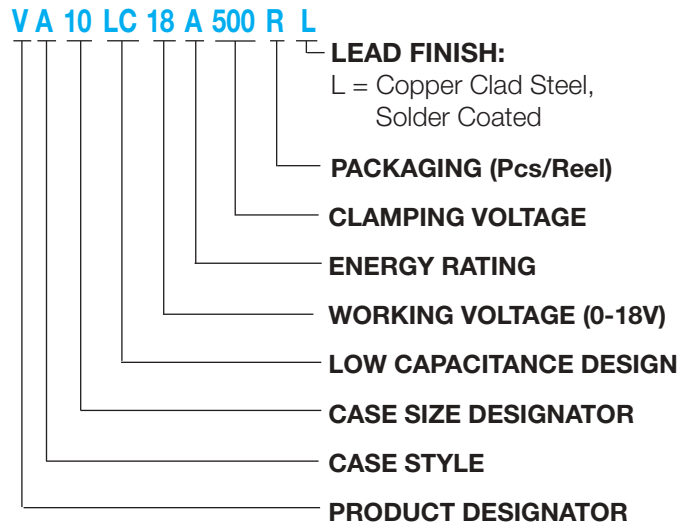
- Typical ESD failure voltage for CMOS and/or Bi Polar is $\geq 200V$.
- 15kV ESD pulse (air discharge) per IEC 1000-4-2, Level 4, generates < 20 millijoules of energy.
- Low capacitance ($< 200pF$) is required for high-speed data transmission.
- Low leakage current (I_L) is necessary for battery operated equipment.

PART NUMBER IDENTIFICATION (See page 2 for details)

Chips



Axials



AVX Part Number	Working Voltage	Clamping Voltage	Peak Current	Transient Energy	Capacitance	Inductance
Symbol	V_{WM}	V_C	I_{peak}	E_{trans}	C	L
Units	Volts (max.)	Volts (max.)	Amp (max.)	Joules (max.)	pF (typ.)	nH (typ.)
Test Condition	$< 10\mu A$	$8/20\mu S^\dagger$	$8/20\mu s$	$10/1000\mu S$	0.5Vrms @: 1 MHz	$di/dt = 100mA/ns$
VC04LC18V500 _ _	See specifications on page 3 and performance data on page 4.					
VC06LC18X500 _ _	≤ 18.0	50	20	.05	75	< 1.0
VC08LC18A500 _ _	≤ 18.0	50	30	0.1	100	< 1.5
VC12LC18A500 _ *	≤ 18.0	50	30	0.1	200	< 1.7
VA10LC18A500 _ L	≤ 18.0	50	30	0.1	200	< 3.5

Termination Finish: X = Pt/Pd/Ag (Non-Plated)
P = Ni/Sn Alloy (Plated)
* = Contact Factory for Availability

Lead Finish: L = Copper Clad Steel, Solder Coated

Packaging (Pcs/Reel): see page 2

V_{WM} —Maximum steady-state DC operating voltage the varistor can maintain and not exceed 50 μA leakage current
 V_C —Maximum peak voltage across the varistor measured at a specified pulse current and waveform

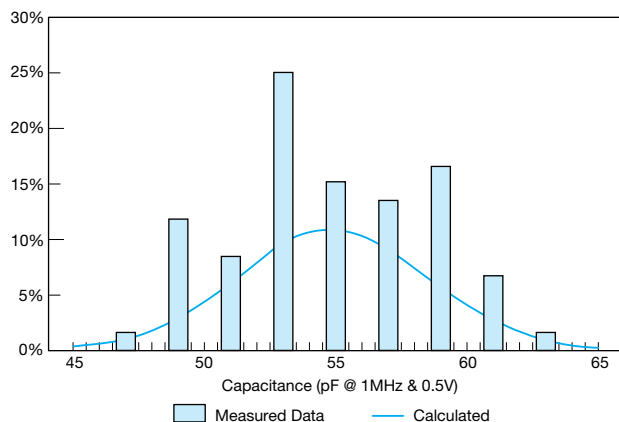
† Transient Energy Rating
 < 0.05 Joule
 0.1 Joule

Pulse Current & Waveform
 1A 8/20 μS
 2A 8/20 μS

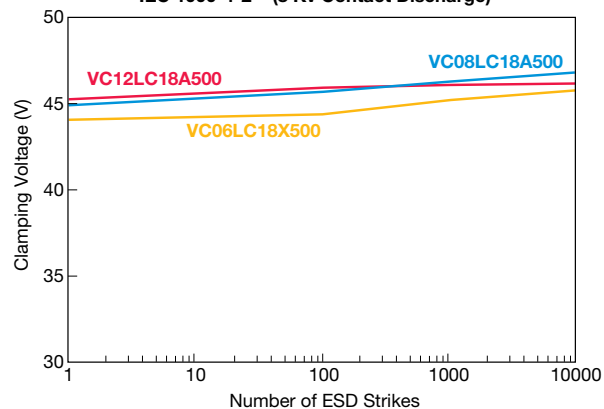
I_{peak} —Maximum peak current which may be applied with the specified waveform without device failure
 E_{trans} —Maximum energy which may be dissipated with the specified waveform without device failure
 C—Device capacitance measured with zero volt bias 0.5Vrms and 1MHz
 L—Device inductance measured with a current edge rate of 100 mA/nS
 Dimensions: Millimeters (Inches)

TYPICAL PERFORMANCE DATA

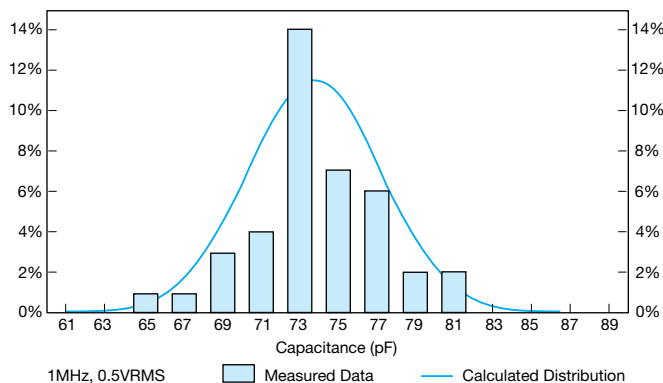
VC06LC18X500 Capacitance Histogram



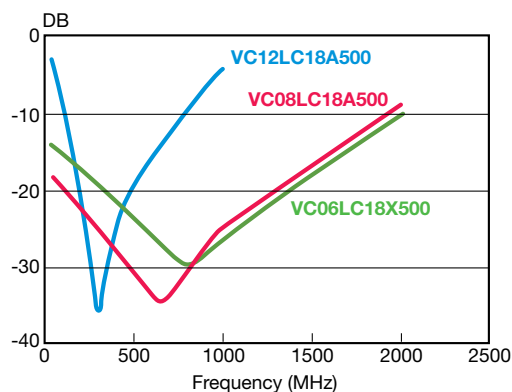
StaticGuard ESD RESPONSE
IEC 1000-4-2 (8 Kv Contact Discharge)



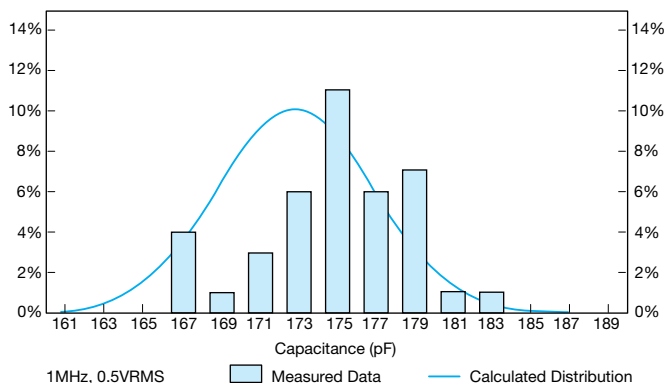
VC08LC18A500 Capacitance Histogram



StaticGuard S21



VC12LC18A500 Capacitance Histogram



VI Curves - StaticGuard Products

