

AntennaGuard/Sub pF

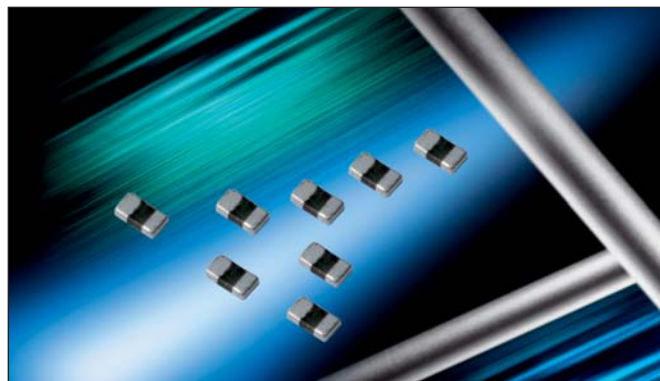


AVX Multilayer Ceramic Transient Voltage Suppressors ESD Protection for any Circuit Sensitive to Capacitance

GENERAL DESCRIPTION

AVX is a leader in circuit protection devices. The 0.8pF device is the first release in a planned series of "RF" MLV offerings, targeting <0.5pF capacitance.

The multi-layer varistor (MLV) is a device that provides protection to sensitive circuits from over-voltage conditions caused by ESD, lightning, NEMP, inductive switching, etc. The sub 1pF surface mount MLV is available in a low profile 0402 case size with 0.8pF capacitance, and is designed to minimize signal distortion and maximize signal speed for sensitive circuits.



FEATURES

- High Reliability
- Capacitance <1pF
- Bi-Directional protection
- Fastest response time to ESD strikes
- Multi-strike capability
- Low insertion loss
- Low profile 0402 case size

APPLICATIONS

- Antennas
- Optics
- HDMI
- RF circuits
- FlexRay
- Portable devices
- Analog sensors
- Any circuit sensitive to capacitance

HOW TO ORDER

VC	H4	AG	10	0R8	M	A	T	W	A
Varistor Chip	Chip Size Thin 0402	Varistor Series AntennaGuard	Working Voltage 10 = 10V 15 = 15V	Capacitance 0R8 = 0.8pF	Tolerance M = $\pm 20\%$	N/A	Termination T = Ni/Sn Alloy	Reel Size W = 7"	Reel Quantity A = 10,000

ANTENNAGUARD CATALOG PART NUMBERS/ELECTRICAL VALUES

AVX Part Number	V _w (DC)	V _B	I _L	Cap	Cap Tolerance	3db Freq (MHz)	Case Size
VCH4AG100R8MA	≤ 10	125	<10 nA	0.8	M	5800	0402
VCH4AG150R8MA	≤ 15	125	<10 nA	0.96 pF Max	M	5800	0402

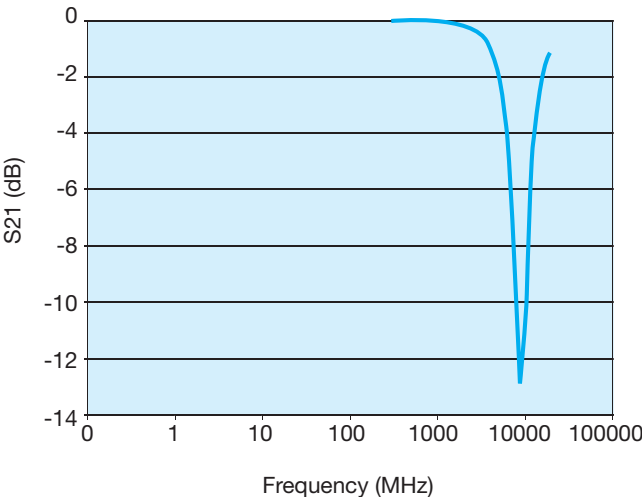
V _w (DC)	DC Working Voltage (V)
V _B	Typical Breakdown Voltage (V @ 1mA _{DC})
I _L	Typical leakage current at the working voltage
Cap	Typical capacitance (pF) @ frequency specified and 0.5V _{RMS}
Freq	Frequency at which capacitance is measured (M = 1MHz)

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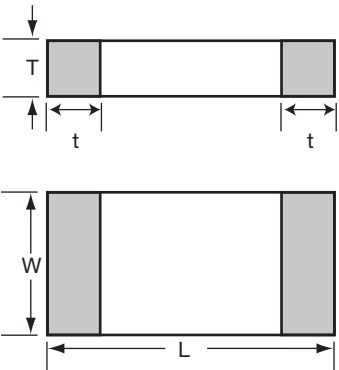
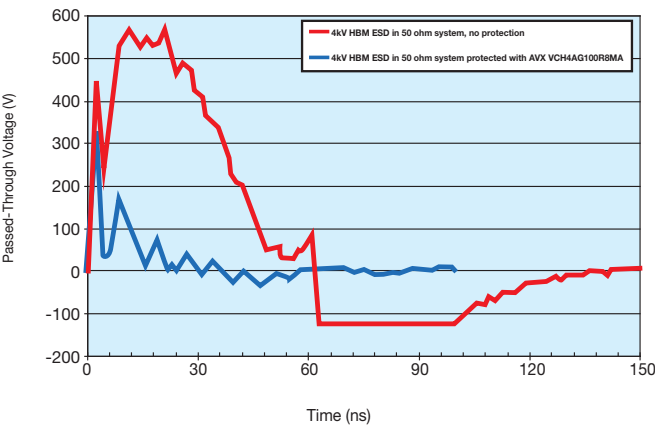


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Typical Shunt Values



Sub pF Antenna Guard Response



mm (inches)

Size (EIA)	0402
Length (L)	1.00 ±0.10 (0.040 ± 0.004)
Width (W)	0.50 ±0.10 (0.020 ±0.004)
Max Thickness (T)	0.35 (0.014)
Terminal (t)	0.25±0.15 (0.010±0.006)