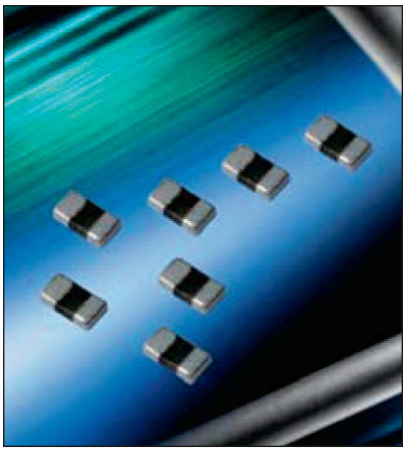
Miniature 0201 MLV

AVX Multilayer Ceramic Transient Voltage Suppressors
ESD Protection for any Circuit with Board Space Constraints



GENERAL DESCRIPTION

AVX 0201 Multi-Layer Varistors are designed for circuits where board space is a premium. 0201 MLV offer bi-directional ESD protection in the smallest package available today. The added advantage is EMI/RFI attenuation. 0201 MLV can replace 2 diodes and the EMC capacitor for a one chip solution.

The miniature size and one chip solution team to offer designers the best in ESD protection and EMI filtering in one ultra compact device.

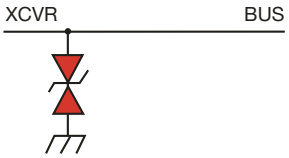
APPLICATIONS

- Cell phone
- PDA
- Camera modules
- Embedded components
- Hearing aid
- Any circuit with space constraints

FEATURES

- Capacitance 15pF to 150pF
- Low V_B Version
- Bi-Directional protection
- Fastest response time to ESD strikes
- Multi-strike capability
- Ultra compact 0201 case size

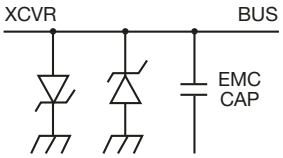
MultiLayer Varistors (MLVs)



MLV PROTECTION METHOD
SINGLE COMPONENT SOLUTION

TVS & EMI

TVS Diodes



DIODE PROTECTION METHOD
THREE COMPONENT SOLUTION

TVS + EMI

HOW TO ORDER

VC	0201	03	V	151	W	P
Varistor Chip	**Chip Size** 0201	**Working Voltage** 03 = 3.5V	**Energy Rating** V = 0.02J	**Capacitance** 151 = 150pF	**Packaging** W = 7" 10kpcs	**Termination** P = Ni Barrier/ 100% Sn (matte)

RoHS COMPLIANT

AVX Part Number	V_W (DC)	V_W (AC)	V_B	V_C	I_{VC}	I_L	E_T	I_P	Cap
VC020103V101WP	3.5	2.0	4.76 min 8.84 max	14max	1	50	0.02	10	100pF ±30%
VC020103V121WP	**3.5**	**2.0**	**4.76 min 8.84 max**	**14max**	**1**	**50**	**0.02**	**10**	**125pF ±30%**
VC020103V151WP	**3.5**	**2.0**	**4.76 min 8.84 max**	**14max**	**1**	**50**	**0.02**	**10**	**150pF ±30%**
VC020105T150WP	5.6	4.0	10.0 min 15.6 max	35max	1	50	0.01	2	15pF ±30%
VC020105T330WP	5.6	4.0	10.0 min 15.6 max	35max	1	50	0.01	4	33pF ±30%
VC020105T500WP	5.6	4.0	10.0 min 15.6 max	35max	1	50	0.01	5	50pF ±30%
VC020105T101WP	5.6	4.0	10.0 min 15.6 max	35max	1	50	0.01	5	100pF ±30%
VC020105V101WP	5.6	4.0	6.4 min 9.6 max	17max	1	50	0.02	4	100pF ±30%
VC020107V101WP	7.0	5.6	9.6 min 14.4 max	20max	1	50	0.02	5	100pF ±30%
VC020116T150WP	16	11	21.7 min 29.3 max	45max	1	50	0.01	1	15pF ±30%

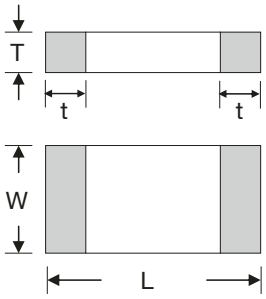
V_W(DC) DC Working Voltage [V]
V_W(AC) AC Working Voltage [V]
V_B Breakdown Votage [V @ 1mADC]
V_C Clamping Votage [V @ IVC]
I_{VC} Test Current for VC [A, 8x20µS]

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 Capacitance [pF] @ 1KHz specified and 0.5VRMS

Miniature 0201 MLV

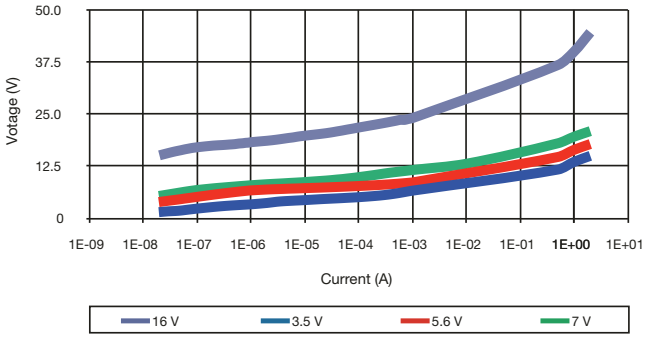
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PHYSICAL DIMENSIONS: mm (inches)

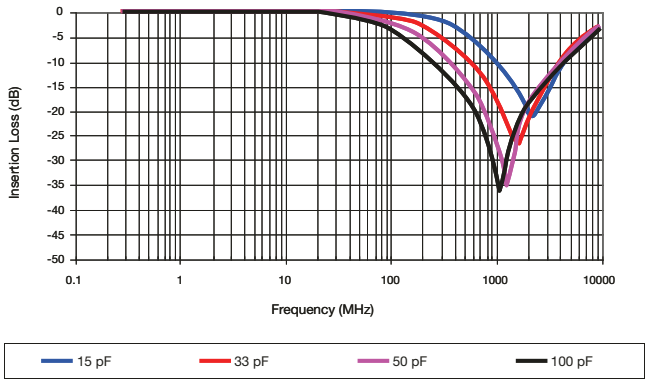


Size (EIA)	Lenght (L)	Width (W)	Max Thickness (T)	Terminal (t)
0201	0.60±0.03 (0.024±.001)	0.30±0.03 (0.011±0.001)	0.33 max. (0.013 max.)	0.15±0.05 (0.006±0.002)

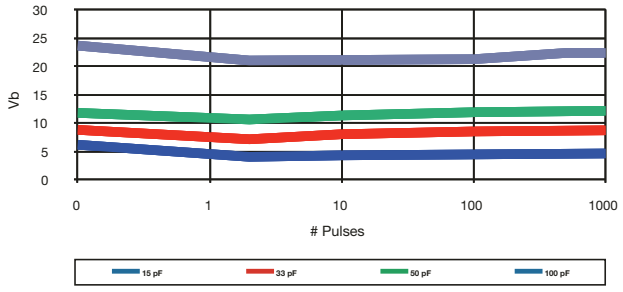
VOLTAGE/CURRENT CHARACTERISTICS



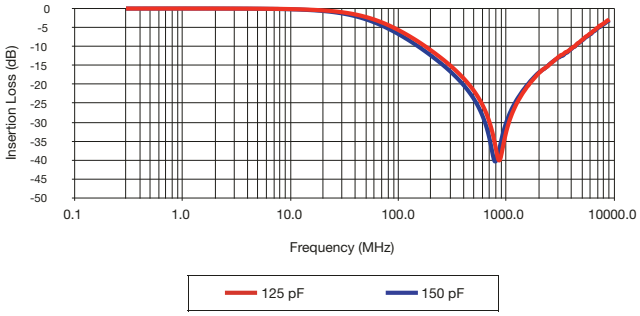
TRANSMISSION CHARACTERISTICS
5.6Vdc



TYPLICAL 8 KV ESD PERFORMANCE
(150pF / 300ohm IEC Network)



3.5Vdc



8kV CONTACT ESD vs PULSE 1 Mohm Input
(150pF / 330ohm Network)

