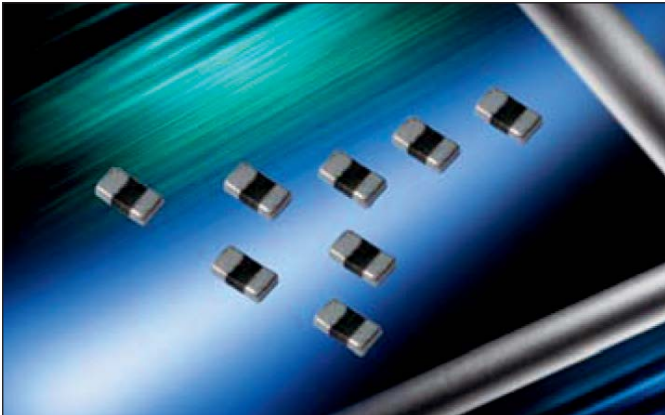




# Miniature 0201 MLV

## 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.

### FEATURES

- High Reliability
- Capacitance 15, 33, 50 & 100pf
- Bi-Directional protection
- Fastest response time to ESD strikes
- Multi-strike capability
- Ultra compact 0201 case size

### APPLICATIONS

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

### HOW TO ORDER

<b>VC</b>	<b>0201</b>	<b>05</b>	<b>T</b>	<b>150</b>	<b>W</b>	<b>P</b>
Varistor Chip	Chip Size 0201	Working Voltage 05 = 5.6V	Energy Rating T = 0.01J	Capacitance 150 = 15pF	Packaging W = 7" 10kpcs	Termination P = Ni Barrier/ 100% Sn (matte)

AVX Part Number	V <sub>W</sub> (DC)	V <sub>W</sub> (AC)	V <sub>B</sub>	V <sub>C</sub>	I <sub>VC</sub>	I <sub>L</sub>	E <sub>T</sub>	I <sub>P</sub>	Cap
VC020105T150WP	5.6	4.0	10.0 min 15.6 max	35max	1	5	0.01	1	15pF ±30%
VC020105T330WP	5.6	4.0	10.0 min 15.6 max	35max	1	5	0.01	1	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%

- |                     |   |                |   |
|---------------------|---|----------------|---|
| V <sub>W</sub> (DC) | DC Working Voltage [V]                  | I <sub>L</sub> | Maximum leakage current at the working voltage [µA] |
| V <sub>W</sub> (AC) | AC Working Voltage [V]                  | E <sub>T</sub> | Transient Energy Rating [J, 10x1000µS]              |
| V <sub>B</sub>      | Breakdown Voltage [V @ 1mADC]           | I <sub>P</sub> | Peak Current Rating [A, 8x20µS]                     |
| V <sub>C</sub>      | Clamping Voltage [V @ I <sub>VC</sub> ] | Cap            | Capacitance [pF] @ 1KHz specified and 0.5VRMS       |
| I <sub>VC</sub>     | Test Current for VC [A, 8x20µS]         |                |   |



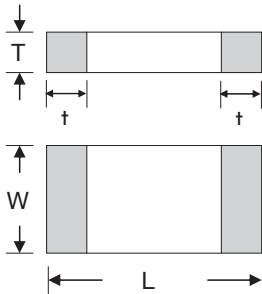
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AVX Multilayer Ceramic Transient Voltage Suppressors

ESD Protection for any Circuit with Board Space Constraints

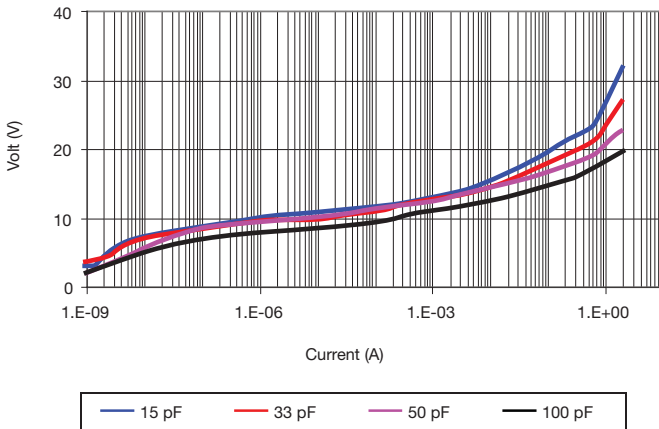


## PHYSICAL DIMENSIONS: mm (inches)

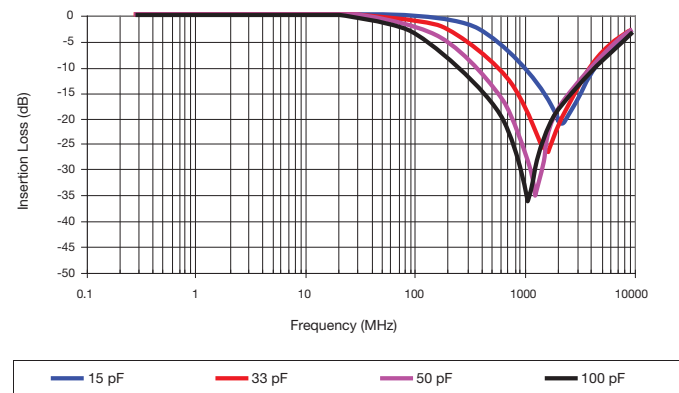


Size (EIA)	Length (L)	Width (W)	Max Thickness (T)	Terminal (t)
0201	0.60±0.03 (0.024±.001)	0.30±0.03 (0.011±0.001)	0.33 max. (0.013 max.)	0.15±0.05 (0.006±0.002)

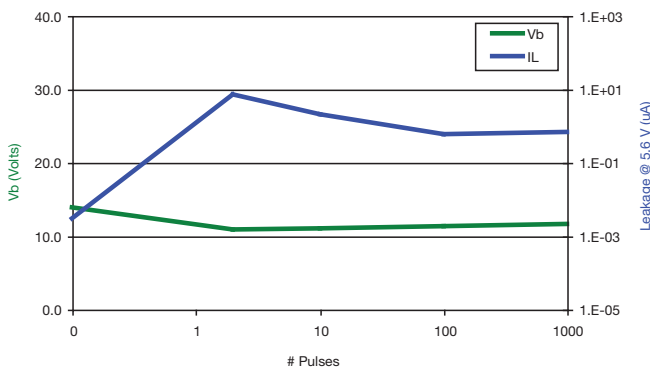
## VOLTAGE/CURRENT CHARACTERISTICS



## TRANSMISSION CHARACTERISTICS



## TYPICAL 8 KV ESD PERFORMANCE



## IMPEDANCE VS. FREQUENCY CHARACTERISTICS

