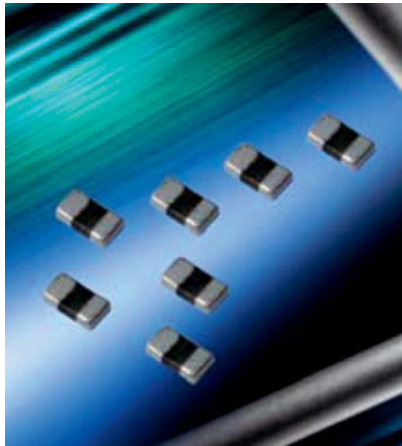


# Miniature 0201 Automotive MLV



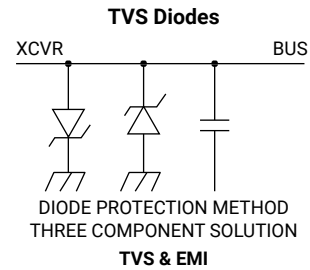
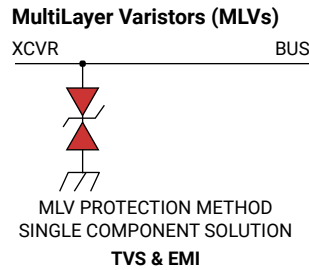
## ESD Protection for Automotive Circuits with Board Space Constraints



### GENERAL DESCRIPTION

AVX 0201 Multi-Layer Automotive 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.



### GENERAL CHARACTERISTICS

- Operating Temperature: -55°C to +125°C
- Working Voltage: 9Vdc
- Case Size: 0201

### APPLICATIONS

- Manifold absolute pressure sensor
- Camera modules
- Embedded components
- Any circuit with space constraints

### FEATURES

- Bi-Directional protection
- AEC-Q200 Qualified
- Low VB Version
- Fastest response time to ESD strikes
- Multi-strike capability
- Ultra compact 0201 case size

### HOW TO ORDER

<b>VC</b>   Varistor Clamp	<b>AS</b>   Automotive Series	<b>0201</b>   Chip Size 0201	<b>09</b>   Working Voltage 09 = 9V	<b>V</b>   Energy Rating V = 0.02J	<b>300</b>   Capacitance 300 = 32V	<b>W</b>   Package W = 7" 10kpcs	<b>P</b>   Termination P = Ni Barrier/ 100% Sn (matte)
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**MSL 1**  
Pb Free 260°C

AVX PN	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	Cap tol
	Vdc	Vac	V	V	A	µA	J	A	pF	
VCAS020109V300WP	9.0	6.4	16.5±10%	32	1	10	0.02	5	30	±40%

V<sub>w</sub>(DC) DC Working Voltage [V]

V<sub>w</sub>(AC) AC Working Voltage [V]

V<sub>B</sub> Breakdown Voltage [V @ 1mADC]

V<sub>C</sub> Clamping Voltage [V @ IVC]

I<sub>VC</sub> Test Current for VC [A, 8x20µS]

I<sub>L</sub> Maximum leakage current at the working voltage [µA]

E<sub>T</sub> Transient Energy Rating [J, 10x1000µS]

I<sub>P</sub> Peak Current Rating [A, 8x20µS]

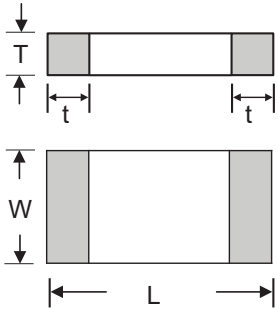
Cap Capacitance [pF] @ 1KHz specified and 0.5VRMS

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### PHYSICAL DIMENSIONS<sup>SL</sup>: mm (inches)



Size (EIA)	Length (L)	Width (W)	Max Thickness (T)	Terminal
0201	0.60±0.03 (0.024±0.001)	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

