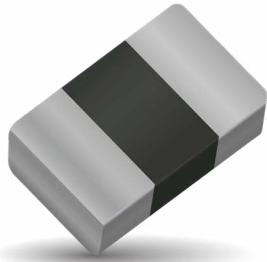


Miniature 0201 Automotive MLV

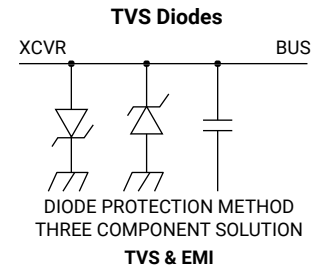
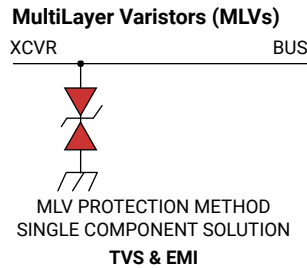
ESD Protection for Automotive Circuits with Board Space Constraints



GENERAL DESCRIPTION

KYOCERA 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 V_B Version
- Fastest response time to ESD strikes
- Multi-strike capability
- Ultra compact 0201 case size

HOW TO ORDER

VC Varistor Clamp	AS Automotive Series	0201 Chip Size 0201	09 Working Voltage 09 = 9V	V Energy Rating V = 0.02J	300 Capacitance 300 = 32V	W Package W = 7" 10kpcs	P Termination P = Ni Barrier/ 100% Sn (matte)	 MSL 1 Pb Free 260°C
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Part Number	V_w (DC)	V_w (AC)	V_B	V_C	I_{VC}	I_L	E_T	I_P	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_w (DC) DC Working Voltage [V]

V_w (AC) AC Working Voltage [V]

V_B Breakdown Voltage [V @ 1mADC]

V_C Clamping Voltage [V @ IVC]

I_{VC} Test Current for VC [A, 8x20 μ S]

I_L Maximum leakage current at the working voltage [μ A]

E_T Transient Energy Rating [J, 10x1000 μ S]

I_P Peak Current Rating [A, 8x20 μ S]

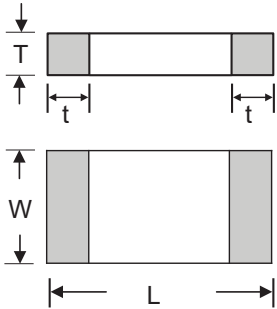
Cap Capacitance [pF] @ 1KHz specified and 0.5 V_{RMS}

Miniature 0201 Automotive MLV

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PHYSICAL DIMENSIONS¹: 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

