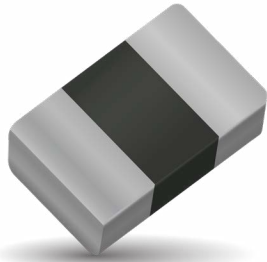


Miniature 0201 Automotive MLV

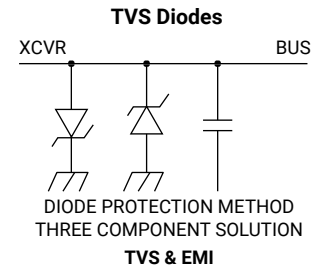
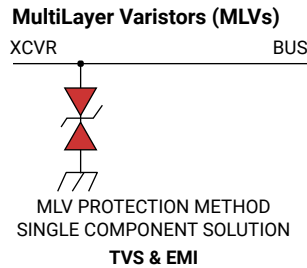
ESD Protection for Automotive Circuits with Board Space Constraints



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
--------------------------------	-----------------------------------	-------------------------------------	--	---	--	---	---	--

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]

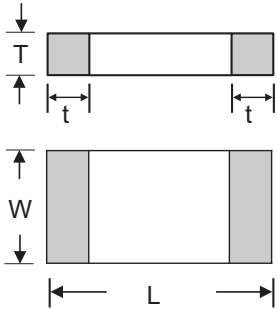
Cap Capacitance [pF] @ 1KHz specified and 0.5 V_{RMS}

Miniature 0201 Automotive MLV

ESD Protection for Automotive Circuits with Board Space Constraints

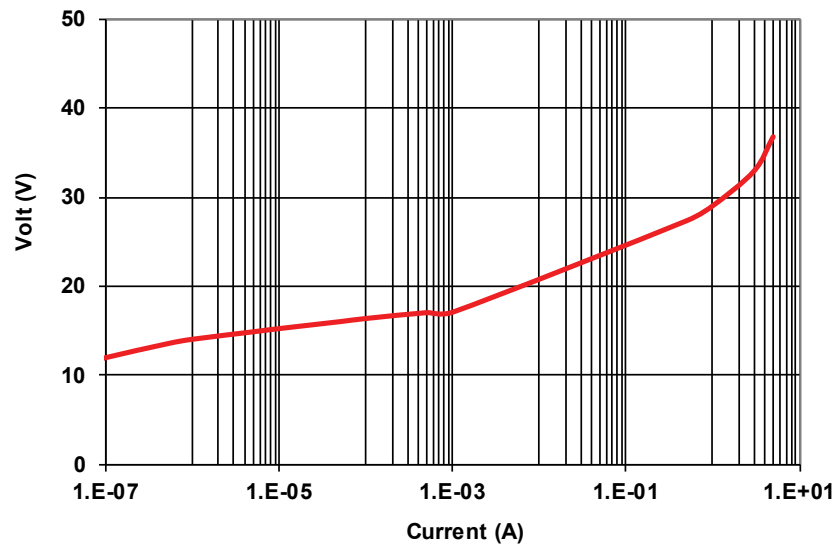


PHYSICAL DIMENSIONS¹: mm (inches)



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



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

KYOCERA AVX:

[VCAS060318A400DP](#) [VCAS080518C400DP](#) [VCAS120618D400DP](#) [VCAS121018J390DP](#) [VCAS040218X400WP](#)
[VCAS060316B400DP](#) [VCAS060316B400RP](#) [VCAS060318A400RP](#) [VCAS060326A580DP](#) [VCAS060326A580RP](#)
[VCAS060330A650DP](#) [VCAS060330A650RP](#) [VCAS080518A400DP](#) [VCAS080518A400RP](#) [VCAS080518C400RP](#)
[VCAS080526A580DP](#) [VCAS080526A580RP](#) [VCAS080526C580DP](#) [VCAS080526C580RP](#) [VCAS080530A650DP](#)
[VCAS080530A650RP](#) [VCAS080530C650DP](#) [VCAS080530C650RP](#) [VCAS080538C770DP](#) [VCAS080538C770RP](#)
[VCAS120616K380DP](#) [VCAS120616K380RP](#) [VCAS120618A400DP](#) [VCAS120618A400RP](#) [VCAS120618D400RP](#)
[VCAS120618E380DP](#) [VCAS120618E380RP](#) [VCAS120626D580DP](#) [VCAS120626D580RP](#) [VCAS120630D650DP](#)
[VCAS120630D650RP](#) [VCAS120642L800DP](#) [VCAS120642L800RP](#) [VCAS120648D101DP](#) [VCAS120648D101RP](#)
[VCAS120656F111DP](#) [VCAS120656F111RP](#) [VCAS121016J390DP](#) [VCAS121016J390RP](#) [VCAS121018J390RP](#)
[VCAS121026H560DP](#) [VCAS121026H560RP](#) [VCAS121030H620DP](#) [VCAS121030H620RP](#) [VCAS121048H101DP](#)
[VCAS121048H101RP](#) [VCAS121085S151DP](#) [VCAS121085S151RP](#) [VCAS06LC18X500TP](#) [VCAS121030S620DP](#)
[VCAS040214X300WP](#) [VCAS080514C300DP](#) [VCAS080514A300DP](#) [VCAS120645K900DP](#) [VCAS040205X150WP](#)
[VCAS121060J121DP](#) [VCAS040209X200WP](#) [VCAS120631M650DP](#) [VCAS060305A150DP](#) [VCAS120605D150DP](#)
[VCAS080509A200DP](#) [VCAS080505A150DP](#) [VCAS080512A250DP](#) [VCAS120605A150DP](#) [VCAS120642K900DP](#)
[VCAS120660M131DP](#) [VCAS060309A200DP](#) [VCAS080531C650DP](#) [VCAS120614A300DP](#) [VCAS060314A300DP](#)
[VCAS120614D300DP](#) [VCAS080505C150DP](#) [VCAS120626F540DP](#) [VCAS120634N770DP](#) [VGAS121065P131DP](#)
[VGAS222034Y770DP](#) [VGAS121034S770DP](#) [VGAS181216P400DP](#) [VGAS222016Y400DP](#) [VGAS181234U770DP](#)
[VCAS060326A580TP](#) [VCAS06AG183R0YAT3A](#) [VCAS120618D400TP](#) [VCAS080518A400TP](#) [VCAS060318A400TP](#)
[VCAS080518C400TP](#) [VCAS060305A150RP](#) [VGAS222031Y650DP](#) [VGAS121031R650DP](#) [VCAS120645K900RP](#)
[VCAS080514C300RX](#) [VCAS120605D150RP](#) [VCAS080514A300RP](#) [VCAS080509A200TP](#) [VCAS121060J121RP](#)