

# High Temp. Low Leakage Automotive Varistors

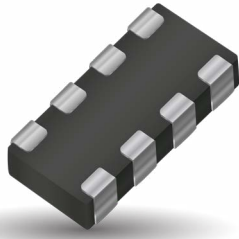
## 150°C Rated Low Leakage Automotive Varistors



### GENERAL DESCRIPTION

KYOCERA AVX High Temperature Low Leakage Multi-Layer Varistors are designed for underhood and high temperature applications where low leakage component is required. Parts are tested, qualified and specified to 150°C.

The MLV advantage is EMI/RFI attenuation in the off state. This allows designers the ability to combine the circuit protection and EMI/RFI attenuation function into a single highly reliable device.



### GENERAL CHARACTERISTICS

- Operating Temperature: -55°C to +150°C

### FEATURES

- Rated at 150°C
- AEC Q200 qualified
- ESD rating to 25kV (HBM ESD Level 6)
- EMI/RFI attenuation in off state
- Very Low Leakage

### APPLICATIONS

- Under hood
- High temperature applications
- Bus Interface Protection
- CAN Bus
- BCM, TCU
- Capacitance sensitive applications and more

## COMMUNICATION BUS - HIGH TEMPERATURE LOW LEAKAGE VARISTOR

### HOW TO ORDER

<b>CAN</b>   <b>Type</b> Controlled Area Network Varistor	<b>ATL</b>   <b>Series</b> Automotive High Temperature Low Leakage	<b>07</b>   <b>Case Size</b> 07 = 0603	<b>R</b>   <b>Packaging</b> D = 7" (1000 pcs) R = 7" (4,000 pcs) T = 13" (10,000 pcs)	<b>P</b>   <b>Termination</b> P = Ni Barrier/100% Sn
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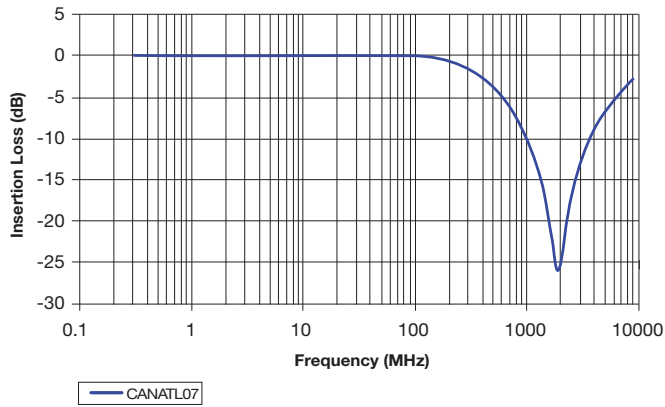
PN	VW (DC)	VW (AC)	VB	VC	IVC	IL	ET	IP	Typ Cap	Cap Tol	Freq	VJump	PDis max
CANATL07	32	25	61±15%	120	1	<1	0.05	5	10	±50%	M	27.5	0.003

$V_w(\text{DC})$	DC Working Voltage [V]	$E_T$	Transient Energy Rating [J, 10x1000µS]
$V_w(\text{AC})$	AC Working Voltage [V]	$I_p$	Peak Current Rating [A, 8x20µS]
$V_B$	Breakdown Voltage [V @ 1mA DC, 25°C]	Cap	Capacitance [pF] @ 1KHz specified and 0.5V <sub>RMS</sub>
$V_C$	Clamping Voltage [V @ IVC]	$V_{\text{Jump}}$	Jump Start [V, 5 min]
$I_{VC}$	Test Current for VC [A, 8x20µs]	$P_{\text{DISS}}$	Max Power Dissipation [W]
$I_L$	Maximum leakage current at the working voltage, 25°C [µA]		

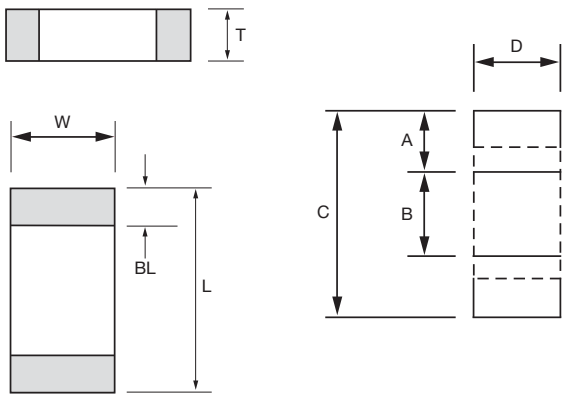
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### S21 CHARACTERISTICS



### PHYSICAL DIMENSIONS AND RECOMMENDED PAD LAYOUT



#### 0603 DISCRETE DIMENSIONS

mm (inches)

L	W	T	BL
1.60±0.15 (0.063±0.006)	0.80±0.15 (0.032±0.006)	0.90 MAX (0.035 MAX)	0.35±0.15 (0.014±0.006)

#### 0603 SOLDERING PAD

mm (inches)

A	B	C	D
0.89 (0.035)	0.76 (0.030)	2.54 (0.100)	0.76 (0.030)