

# 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

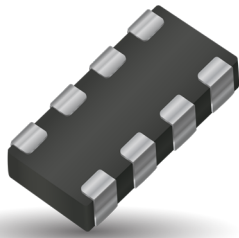
- Operating Temperature:  
-55°C to +150°C

### 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

**CAN**  
Type  
Controlled Area  
Network Varistor

**ATL**  
Series  
Automotive  
High Temperature  
Low Leakage

**07**  
Case Size  
07 = 0603

**R**  
Packaging  
D = 7" (1000 pcs)  
R = 7" (4,000 pcs)  
T = 13" (10,000 pcs)

**P**  
Termination  
P = Ni Barrier/100% Sn



PN	VW (DC)	VW (AC)	VB	VC	IVC	IL	ET	IP	Typ Cap	Cap Tol	Freq	VJump	PDiss 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]  
 $V_w(\text{AC})$  AC Working Voltage [V]  
 $V_B$  Breakdown Voltage [V @ 1mA DC, 25°C]  
 $V_C$  Clamping Voltage [V @ IVC]  
 $I_{VC}$  Test Current for VC [A, 8x20µs]  
 $I_L$  Maximum leakage current at the working voltage, 25°C [µA]

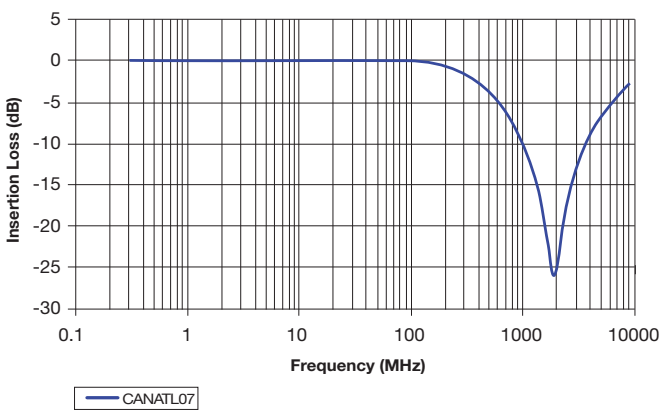
$E_T$  Transient Energy Rating [J, 10x1000µs]  
 $I_P$  Peak Current Rating [A, 8x20µs]  
Cap Capacitance [pF] @ 1KHz specified and 0.5V<sub>RMS</sub>  
 $V_{\text{Jump}}$  Jump Start [V, 5 min]  
 $P_{\text{DISS}}$  Max Power Dissipation [W]

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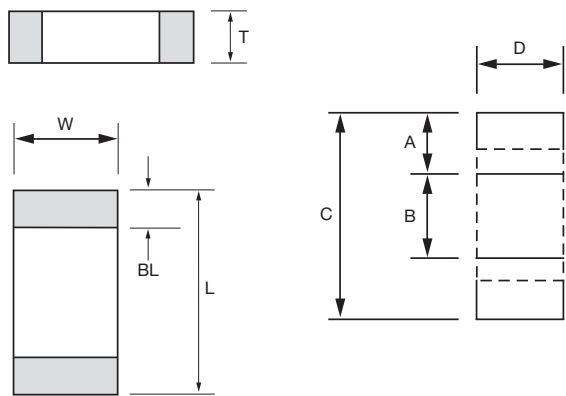
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S21 CHARACTERISTICS



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)