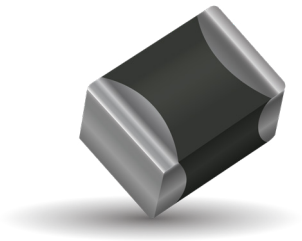
Low Capacitance +150°C Automotive Series Varistors

150°C Rated Varistors with Low Signal Distortion / Low Capacitance



GENERAL DESCRIPTION

AVX Low Capacitance High Temperature Multi-Layer Varistors are designed for High Temperature applications up 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. Low Capacitance Varistors have low signal distortion, low loss and low capacitance.

FEATURES

- Operating Temperature: -55°C to +150°C
- AEC Q200 qualified
- ESD rating to 25kV contact
- EMI/RFI attenuation in off state
- Excellent current and energy handling

APPLICATIONS

- Under hood
- Down Hole Drilling
- High temperature applications
- Communication Bus
- Sensors
- RF Circuits
- Capacitance sensitive applications and more

HOW TO ORDER

CAN SERIES

CAN	AT	01	R	P
Type Controlled Area Network Varistor	**Series** Automotive High Temperature	**Case Size** 01 = 0603 02 = 0405 2-Element 04 = 0612 4-Element	**Packaging** D = 7" (1000 pcs) R = 7" (4,000 pcs) T = 13" (10,000pcs)	**Termination** P = Ni Barrier/ 100% Sn (matte)

RoHS COMPLIANT

AVX Part Number	V_W (DC)	V_W (AC)	V_B	I_L	E_T	I_P	Cap	Case Size	Elements
CANAT01--	≤ 18	≤ 14	120	10	0.015	4	22	0603	1
CANAT02--	≤ 18	≤ 14	70	10	0.015	4	22	0405	2
CANAT04--	≤ 18	≤ 14	100	10	0.015	4	22	0612	4

CANATL SERIES

CAN	ATL	07	R	P
Type Controlled Area Network Varistor	**Series** Automotive High Temperature Low Leakage	**Case Size** 07 = 0603	**Packaging** D = 7" (1000 pcs) R = 7" (4,000 pcs) T = 13" (10,000pcs)	**Termination** P = Ni Barrier/100% Sn

RoHS COMPLIANT

PN	V_W(DC)	V_W(AC)	V_B	V_C	I_{VC}	I_{L1}	I_{L2}	E_T	I_P	Typ Cap	Cap Tol	V_{Jump}	P_{Diss}	Case Size
CANATL07	32	25	61±15%	120	1	1	<1	0.05	5	10	±50%	27.5	0.003	0603

V_W(DC)	DC Working Voltage [V]
V_W(AC)	AC Working Voltage [V]
V_B	Breakdown Votage [V @ 1mA$_{DC}$, 25°C]
V_C	Clamping Votage [V @ I_{IVC}]
I_{VC}	Test Current for VC [A, 8x20µs]
I_{L1}	Maximum leakage current at the working voltage, 25°C [µA]
I_{L2}	Typical leakage current at 28Vdc, 25°C [µA]
E_T	Transient Energy Rating [J, 10x1000µS]
I_P	Peak Current Rating [A, 8x20µS]
Cap	Capacitance [pF] @ 1MHz and 0.5V_{RMS}
V_{Jump}	Jump Start [V, 5 min]
P_{DISS}	Max Power Dissipation [W]

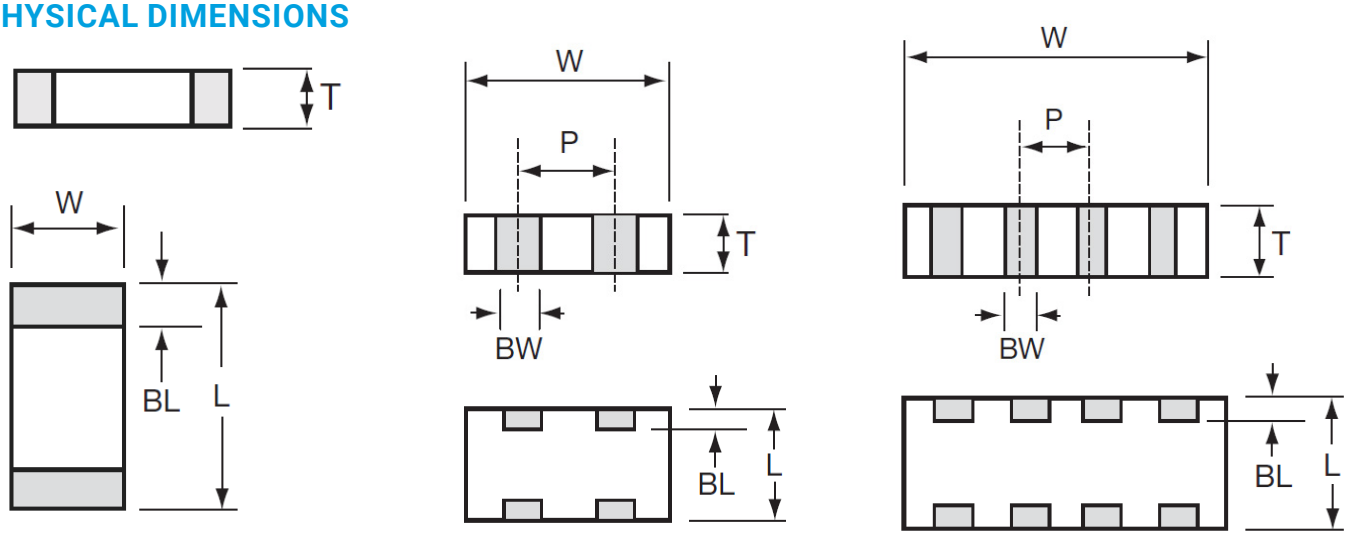
ANTENNAGUARD SERIES

VCAT	06	AG	18	120	Y	A	T	1	A
Type High Temperature Varistor	**Case Size** 04 = 0402 06 = 0603	**Varistor Series** AntennaGuard	**Working Voltage** 18 = 18Vdc	**Cap**	**Non-Std. Cap Tolerance**	**N/A**	**Termination Finish** P = Ni Barrier/ 100% Sn	**Reel Size** 1 = 7" 3 = 13"	**Reel Quantity** A = 4000 or 10,000

AVX Part Number	V_W(DC)	V_W(AC)	I_L	Cap	Cap Tolerance	Case Size
VCAT06AG18120YAT--	≤ 18	≤ 14	10	12	+4, -2pF	0603

V_W(DC)	DC Working Voltage [V]
V_W(AC)	AC Working Voltage [V]
I_L	Maximum leakage current at the working voltage [µA]
Cap	Capacitance [pF] @ 1MHz specified and 0.5V_{RMS}

PHYSICAL DIMENSIONS



0603 DISCRETE DIMENSIONS

mm (inches)

L	W	T	BW	BL	P
1.60±0.15 (0.063±0.006)	0.80±0.15 (0.032±0.006)	0.90 MAX (0.035 MAX)	N/A	0.35±0.15 (0.014±0.006)	N/A

0405 2 ELEMENTS ARRAY DIMENSIONS

mm (inches)

L	W	T	BW	BL	P
1.00±0.15 (0.039±0.006)	1.37±0.15 (0.054±0.006)	0.66 MAX (0.026 MAX)	0.36±0.10 (0.014±0.004)	0.20±0.10 (0.008±0.004)	0.64 REF (0.025 REF)

0612 4 ELEMENTS ARRAY DIMENSIONS

mm (inches)

L	W	T	BW	BL	P
1.60±0.20 (0.063±0.008)	3.20±0.20 (0.126±0.008)	1.22 MAX (0.048 MAX)	0.41±0.10 (0.016±0.004)	0.18 $^{+0.25}_{-0.08}$ (0.008 $^{+.010}_{-.003}$)	0.76 REF (0.030 REF)

S21 CHARACTERISTICS - CANATL07