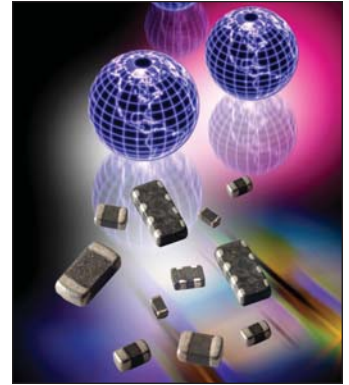


GENERAL DESCRIPTION

The CAN BUS varistor is a zinc oxide (ZnO) based ceramic semiconductor device with non-linear voltage-current characteristics (bi-directional) similar to back-to-back Zener diodes and an EMC capacitor in parallel (see equivalent circuit model). They have the added advantage of greater current and energy handling capabilities as well as EMI/RFI attenuation. Devices are fabricated by a ceramic sintering process that yields a structure of conductive ZnO grains surrounded by electrically insulating barriers, creating varistor like behavior.



HOW TO ORDER

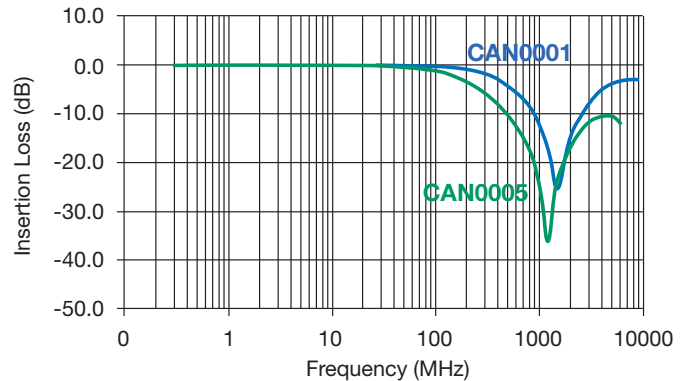
CAN	0001	D	P	
Style	Case Size	Packaging Code (Reel Size)	Termination	
Controlled Area Network Varistor Series	0001 = 0603 Discrete 0002 = 0405 2-Element 0004 = 0612 4-Element 0005 = 0402 Discrete	D = 7" reel (1,000 pcs.) R = 7" reel (4,000 pcs.) T = 13" reel (10,000 pcs.) W = 7" reel (10,000 pcs.)	P = Ni/Sn Alloy (Plated)	
				 0402, 0603 Discrete
				 0405 Array
				 0612 Array

PERFORMANCE CHARACTERISTICS

AVX Part No.	V _W (DC)	V _W (AC)	V _B	I _L	E _T	I _P	Cap.	Case Size	Elements
CAN0001	≤18	≤14	120	2	0.015	4	22	0603	1
CAN0002	≤18	≤14	70	2	0.015	4	22	0405	2
CAN0004	≤18	≤14	100	2	0.015	4	22	0612	4
CAN0005	≤18	≤14	33	2	0.015	4	37	0402	1

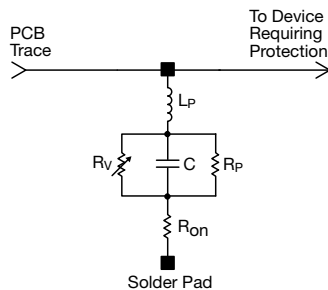
Termination Finish Code
Packaging Code

V_W(DC) DC Working Voltage (V)
V_W(AC) AC Working Voltage (V)
V_B Typical Breakdown Voltage (V @ 1mA_{DC})
V_C Clamping Voltage (V @ I_{VC})
I_{VC} Test Current for V_C (A, 8x20μS)
I_L Maximum Leakage Current at the Working Voltage (μA)
E_T Transient Energy Rating (J, 10x1000μS)
I_P Peak Current Rating (A, 8x20μS)
Cap Maximum Capacitance (pF) @ 1 MHz and 0.5V_{rms}
Temp Range -55°C to +125°C



EQUIVALENT CIRCUIT MODEL

Discrete MLV Model



Where: R_v = Voltage Variable resistance (per VI curve)
R_p ≥ 10¹² Ω
C = defined by voltage rating and energy level
R_{on} = turn on resistance
L_p = parallel body inductance

Typical Pulse Rating Curve

