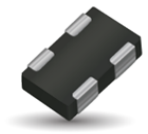
MAV0020RP

(0405 2x, 70Vdc, 0.02J, 3A, 8pF, Ni/Sn Term)

Miniature AC & Low Capacitance Varistor

for Automotive, Industrial and General applications



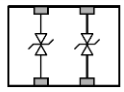
AEC-Q200 Qualified

MAV series devices are an ideal solution to transient suppression in Low Power AC, LC resonant circuits intended for signal, low capacitance makes these parts useful also for higher DC voltage data lines and other capacitance sensitive applications. Advantages include larger in-rush current capability compared to diodes, low loss/low signal distortion, very fast turn-on time, multiple strikes capabilities and EMI/RFI attenuation in single component.

Electrical Characteristics

Operating Temperature	-55 to +125°C

Case Size	V_W (DC)	V_W (AC)	V_B	V_C	I_{VC}	I_L	E_T	PP	I_P	Cap	Cap Tol
EIA	Vdc	Vac	V	V	A	μA	J	W	A	pF	-
0405 2x	70	52	120±15%	225	1	10	0.02	2260	3	8	Max



2 Element

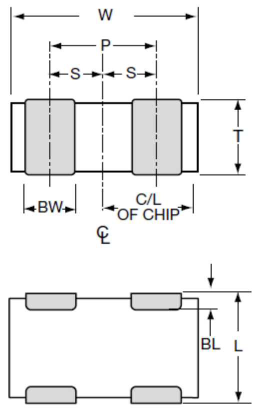
V_W(DC)	DC Working Voltage [V]
V_W(AC)	AC Working Voltage [V]
V_B	Typical Breakdown Votage [V @ 1mA$_{DC}$]
V_C	Clamping Voltage [V @ I_{VC}]
I_{VC}	Test Current for V_C [A, 8x20μs]
I_L	Maximum leakage current at the working voltage [μA]
E_t	Transient Energy Rating [J, 10x1000μS]
PP	Peak Power Rating [W, 10x1000μS]
I_P	Peak Current Rating [A, 8x20μS]
Cap	Typical capacitance [pF] @1MHz and 0.5VRMS
Cap tol	Capacitance tolerance from typical value
P_{DISS}	Max Power Dissipation [W]

Dimensions

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	BW
0405 2x	1.00±0.15	1.37±0.15	0.66 max	0.36±0.10
	(0.039±0.006)	(0.054±0.006)	(0.026 max)	(0.014±0.004)

BL	P	S
0.20±0.10	0.64 REF	0.32±0.10
(0.008±0.004)	(0.025 REF)	(0.013±0.004)



Termination

Ni barrier/100% Sn plated termination for lead free soldering.

RoHS COMPLIANT

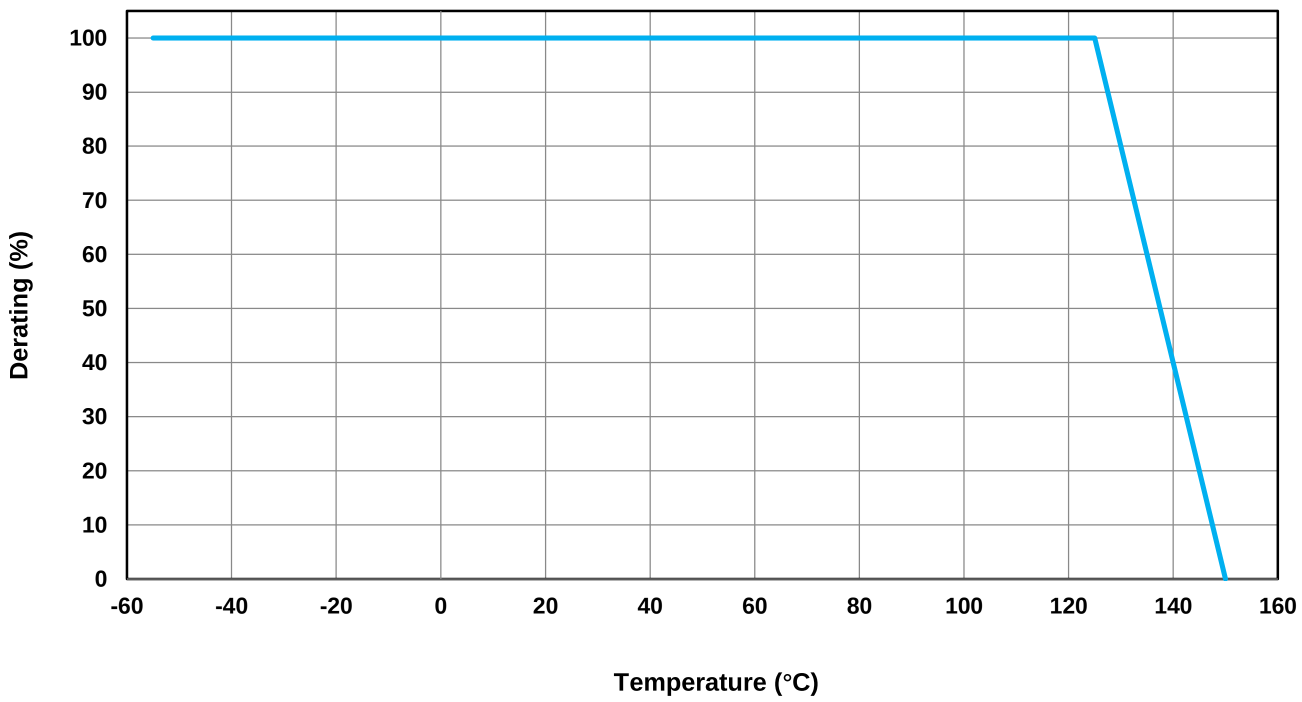
MSL 1

Pb Free 260°C

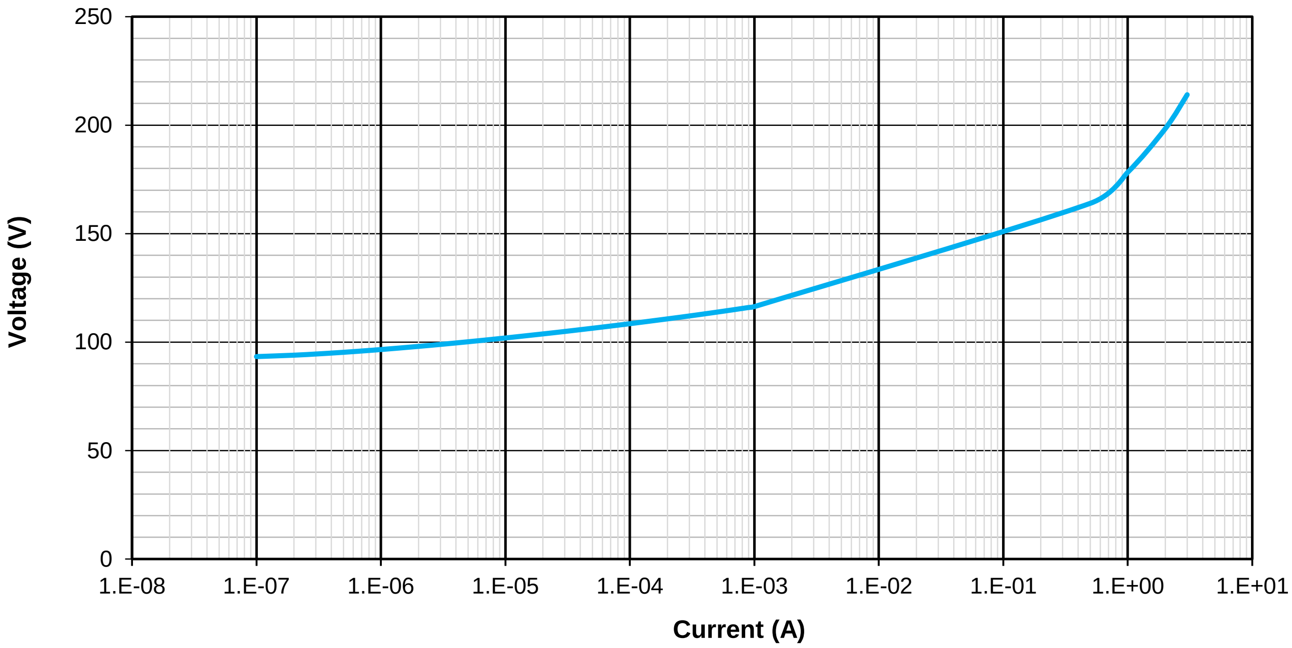
How to order (Packaging options)

MAV	0020	R	P
Style	Case Size	Packaging	Termination
	0020 = 0405 2x	D = 7“ reel (1,000pcs) R = 7“ reel (4,000pcs) T = 13“ reel (10,000pcs)	P = Ni/Sn

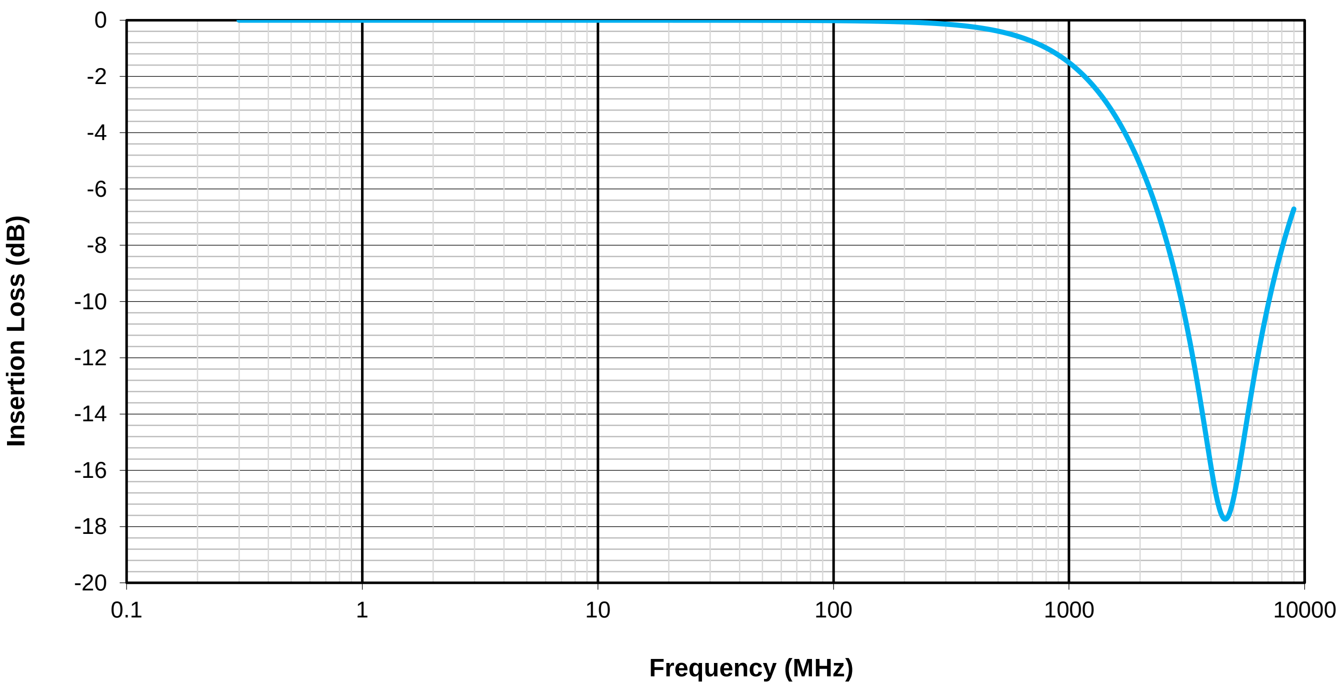
Typical Energy Derating Curve (Transient Energy, Peak Current, Power)



Voltage / Current Characteristics



S21 Characteristics



Power Derating