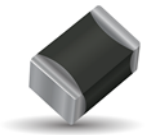
VCUG120030H1RP

(1206, 3Vdc, 0.4J, 150A, 3000pF, Ni/Sn Term)

UltraGuard Multilayer Varistors

for Industrial and General applications



AVX UltraGuard multilayer varistors provide bi-directional overvoltage protection as well as EMI/RFI attenuation in a single SMT package with very low leakage ≤1µA. AVX MLVs are zinc oxide (ZnO) based ceramic semiconductor devices with non-linear voltage-current characteristics (bi-directional) similar to back-to-back zener diodes with added advantage of greater current and energy handling capabilities, very fast turn-on time, multiple strikes capabilities as well as EMI/RFI attenuation in the off-state.

Electrical Characteristics

Operating Temperature	-55 to +125°C

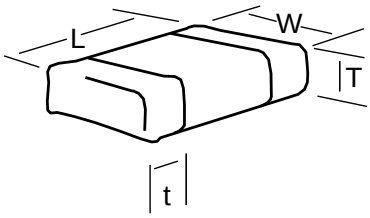
Case Size	V_W (DC)	V_W (AC)	V_B	V_C	I_{VC}	I_L	E_T	PP	I_P	Cap	Cap Tol
EIA	Vdc	Vac	V	V	A	µA	J	W	A	pF	-
1206	3	2.3	6.8	18	1	1	0.4	300	150	3000	+100/-50%

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] @1kHz and 0.5VRMS
Cap tol	Capacitance tolerance from typical value

Dimensions

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
1206	3.20±0.20	1.60±0.20	1.02 max	0.94 max
	(0.126±0.008)	(0.063±0.008)	(0.040 max)	(0.037 max)



Termination

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

RoHS COMPLIANT

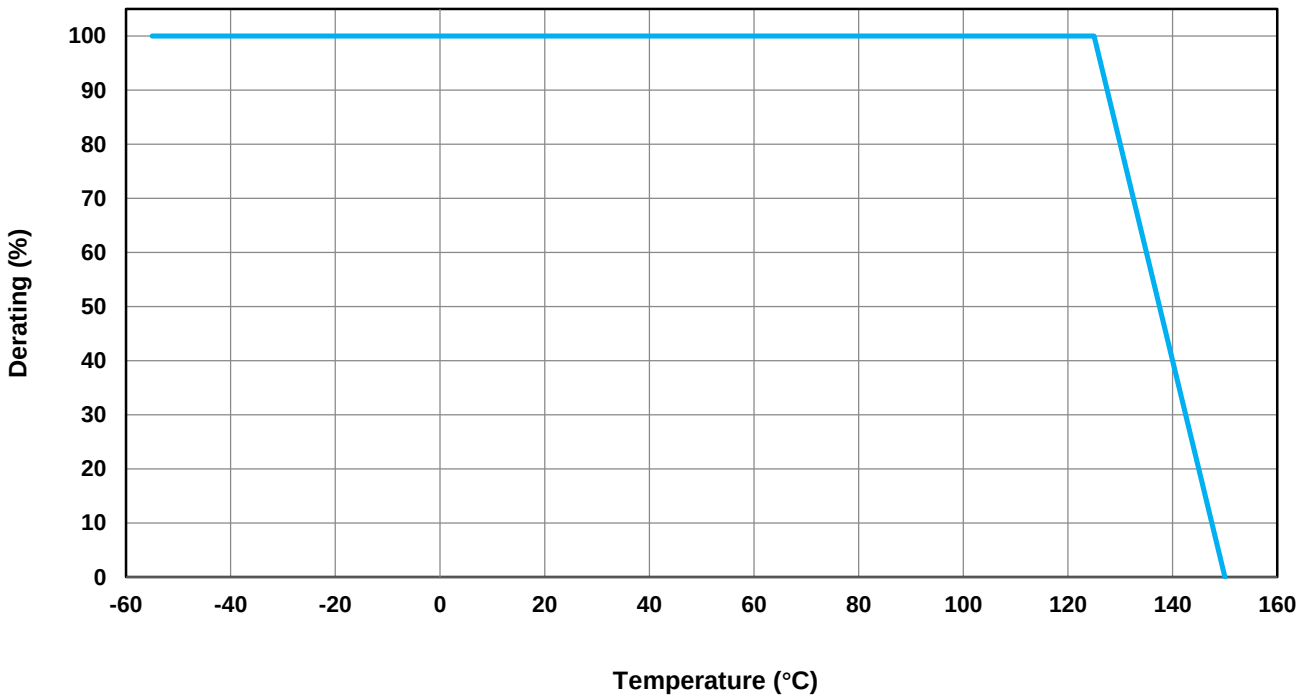
MSL 1

Pb Free 260°C

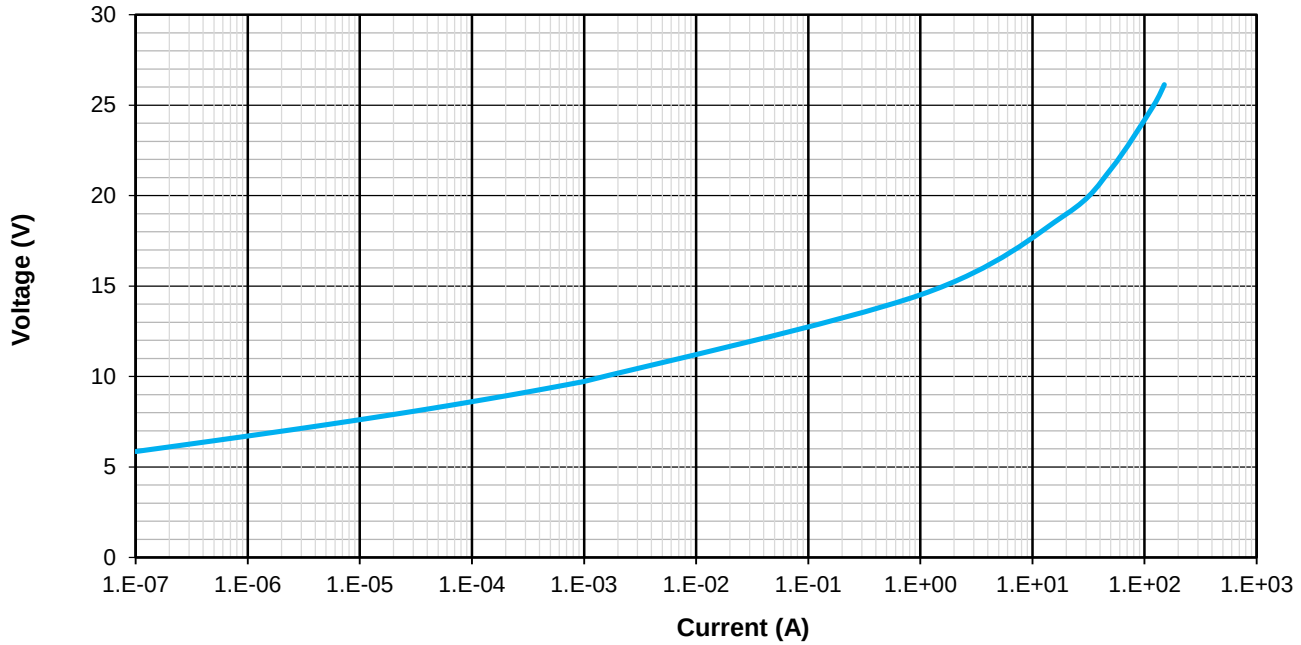
How to order (Packaging options)

VC	UG	12	0030	H	1	R	P
Varistor Chip	Low Leakage	Case Size	Working Voltage	Capacitance	No of Elements	Packaging	Termination
			0030 = 3Vdc	H = High	1 = 1 element	# # #	P = Ni/Sn

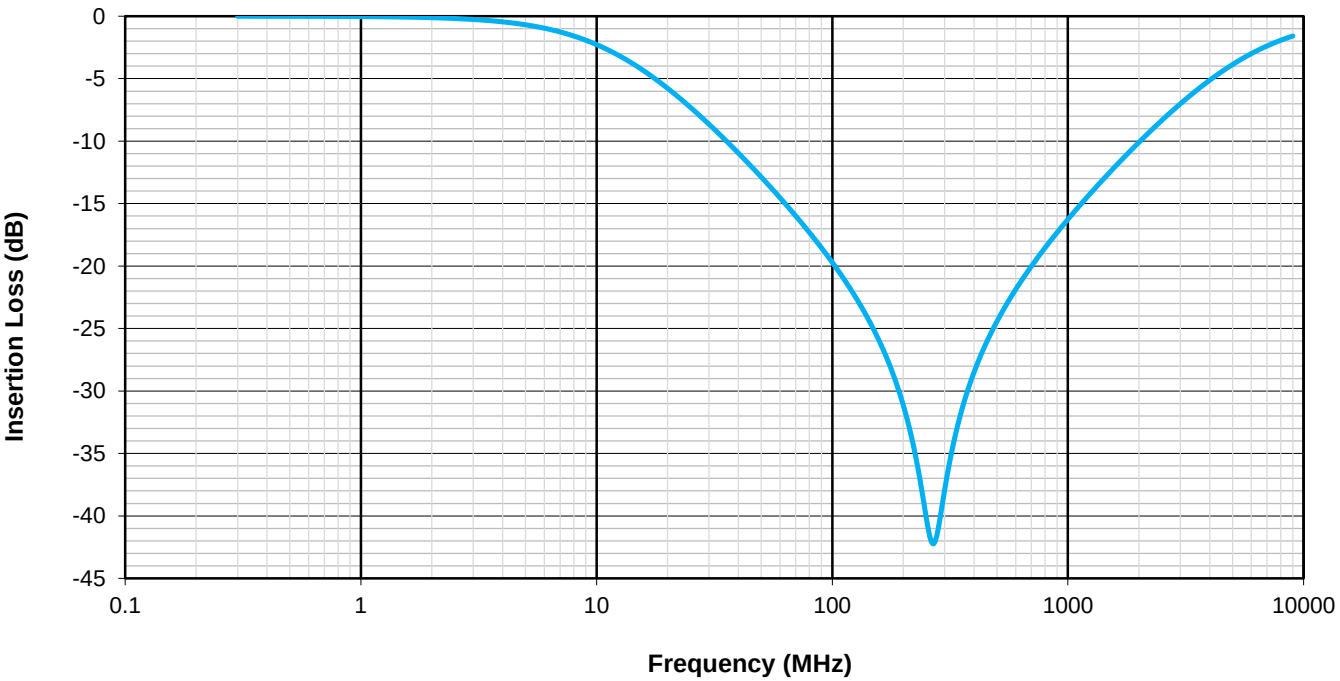
Typical Energy Derating Curve (Transient Energy, Peak Current, Power)



Voltage / Current Characteristics



S21 Characteristics



Power Derating