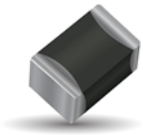
VTA3080514C300TP

(0805, 14Vdc, 0.3J, 120A, 900pF, Ni/Sn Term)

High Temperature +150°C Automotive Multilayer Varistors

for Automotive, Industrial and General applications



AEC-Q200 Qualified

AVX High Temperature 150°C (VTA3) Multi-Layer Varistors are designed for under hood and other high temperature automotive or industrial and general applications. They offer bi-directional overvoltage protection as well as EMI/RFI attenuation in a single SMT package. This allows designers the ability to combine the circuit protection and EMI/RFI attenuation function into a single highly reliable device. Products have been tested, qualified, and specified to 150°C (VTA3) and they do not require any derating over specified operating temperature range.

Electrical Characteristics

Operating Temperature	-55 to +150°C

Case Size	V_W (DC)	V_W (AC)	V_B	V_C	I_{VC}	I_L	E_T	E_{LD}	PP	I_P	Cap	Cap Tol	V_{JUMP}
EIA	Vdc	Vac	V	V	A	µA	J	J (10x)	W	A	pF	-	V (5min)
0805	14	10	18.5±12%	32	1	10	0.3	0.7	225	120	900	+100/-50%	20

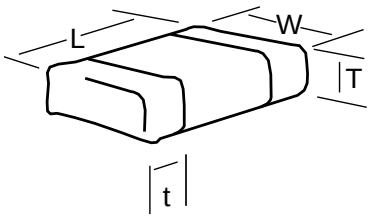
P_{DISS}
W
0.006

V_W(DC)	DC Working Voltage [V]	E_{LD}	Load Dump Energy (x10) [J]
V_W(AC)	AC Working Voltage [V]	PP	Peak Power Rating [W, 10x1000µS]
V_B	Typical Breakdown Votage [V @ 1mA$_{DC}$]	I_P	Peak Current Rating [A, 8x20µS]
V_C	Clamping Voltage [V @ I_{VC}]	Cap	Typical capacitance [pF] @1kHz and 0.5VRMS
I_{VC}	Test Current for V_C [A, 8x20µs]	Cap tol	Capacitance tolerance from typical value
I_L	Maximum leakage current at the working voltage [µA]	V_{JUMP}	Jump start voltage [V, 5min]
E_t	Transient Energy Rating [J, 10x1000µS]	P_{DISS}	Max Power Dissipation [W]

Dimensions

mm (inches)

Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
0805	2.01±0.20	1.25±0.20	1.02 max	0.71 max
	(0.079±0.008)	(0.049±0.008)	(0.040 max)	(0.028 max)



Termination

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

RoHS COMPLIANT

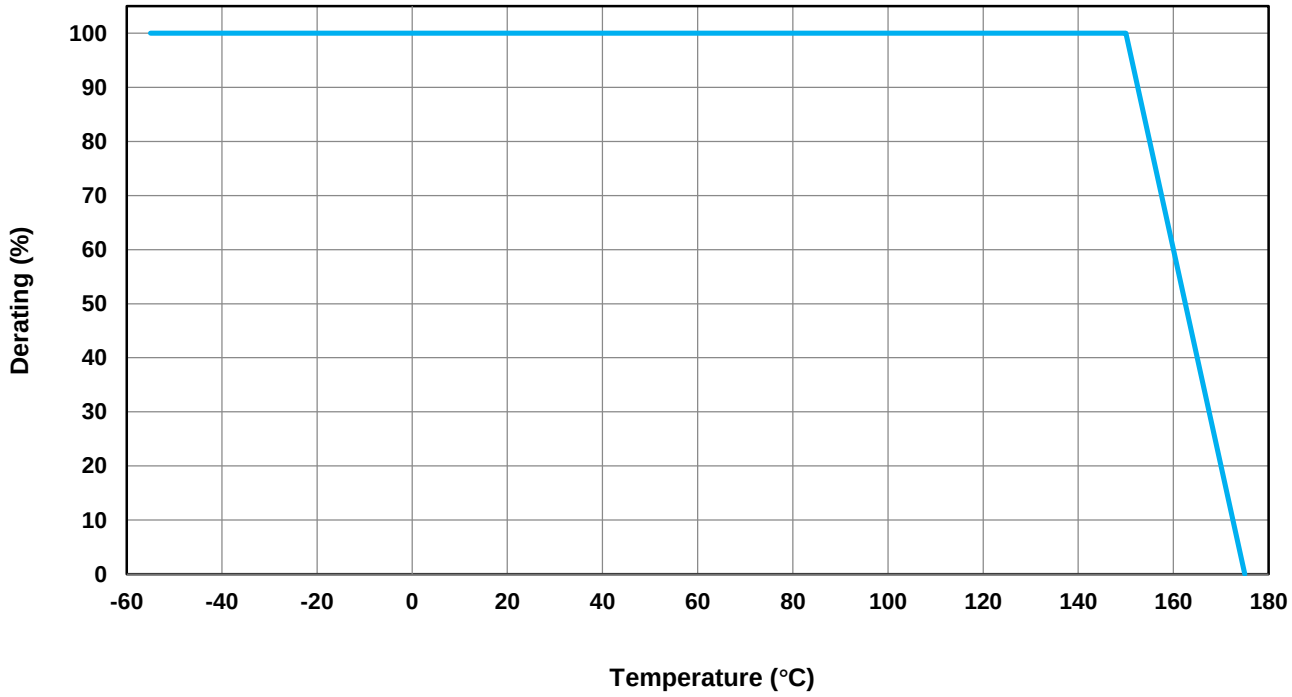
MSL 1

Pb Free 260°C

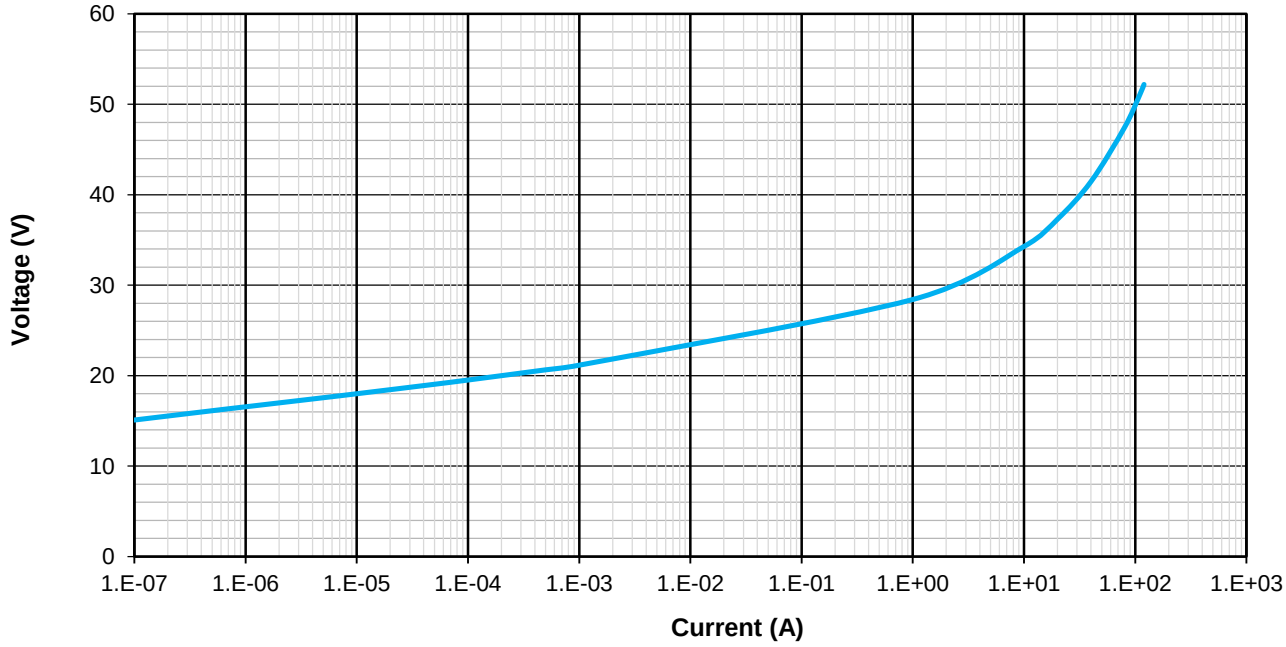
How to order (Packaging options)

VTA3	0805	14	C	300	T	P
Varistor Automotive 150°C	Case Size	Working Voltage	Energy Rating	Clamping Voltage	Packaging	Termination
		14 = 14Vdc	C = 0.3J	300 = 32V	D = 7“ reel (1,000pcs) R = 7“ reel (4,000pcs) T = 13“ reel (10,000pcs)	P = Ni/Sn

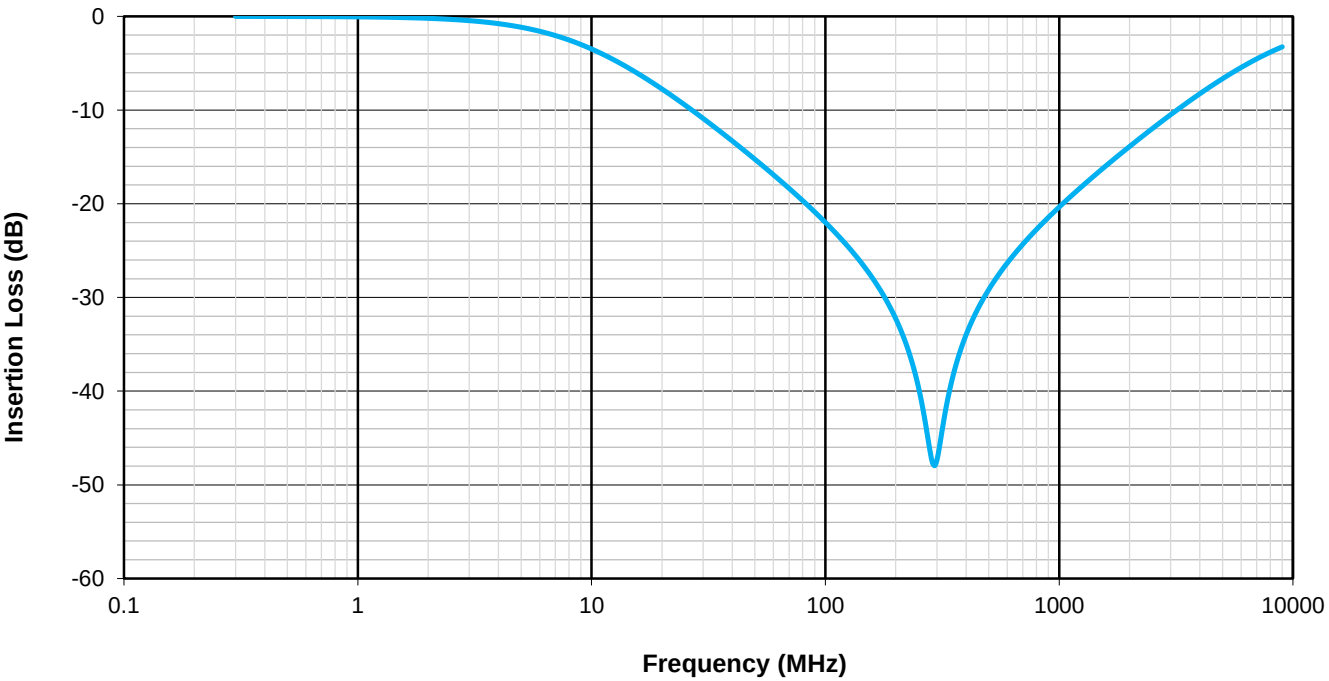
Typical Energy Derating Curve (Transient Energy, Peak Current, Power)



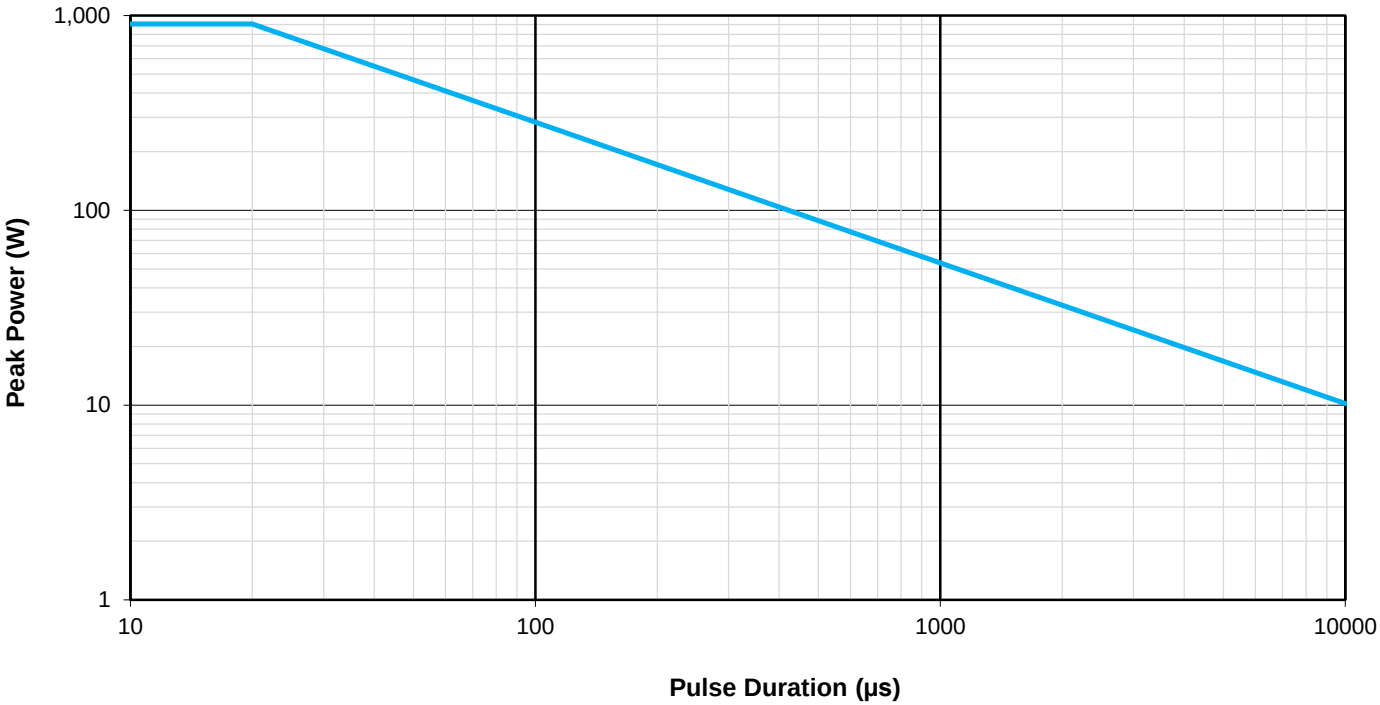
Voltage / Current Characteristics



S21 Characteristics



Power Derating



NOTICE: Specifications are subject to change without notice. All statements, information and data given herein are beleived to be accurate and reliable, but are presented without guarantee or responsibility of any kind, expressed or implied. Specifications are typical and may not apply to all applications.