CG21AS45K105MR

(CG21, 45Vdc, 0.6J, 1200A, 18000pF, Ni/Sn Term)

CapGuard Automotive Multilayer Varistors

for Automotive, Industrial and General applications



AEC-Q200 Qualified

AVX's radial leaded CapGuard™ products are designed to provide both transient voltage protection and EMI/RFI suppression for electronic circuits. CapGuards™ are ideally suited to filter out EMI/RFI noise generated by switch mode power supplies or motors on DC lines or I/O lines in electronic circuits. Varistor provides bi-directional transient voltage protection and X7R capacitor absorbs high frequency noise on the line over broad frequency range.

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	E_{LD}	PP	I_P	Cap	Cap Tol	V_{JUMP}
EIA	Vdc	Vac	V	V	A	µA	J	J (10x)	W	A	µF	-	V (5min)
CG21	45	35	56.0±10%	90	1	15	0.6	1.25	450	1200	0.018	+100/-50%	-

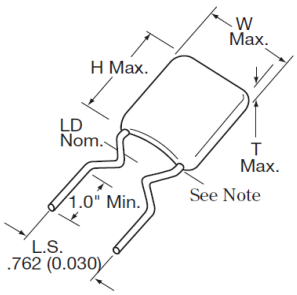
P_{DISS}
W
-

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)

Style	Width (L)	Height (W)	Thickness (T)	Lead Spacing	Lead Diameter
CG21	6.35 Max	8.25 Max	5.08	5.08±0.76	0.508 nom.
	(0.250)	(0.325)	(0.200)	(0.200±0.030)	(0.020)



Note: Coating clean .784 (0.031) min. above seating plane

Termination

Ni wire/Sn

RoHS COMPLIANT

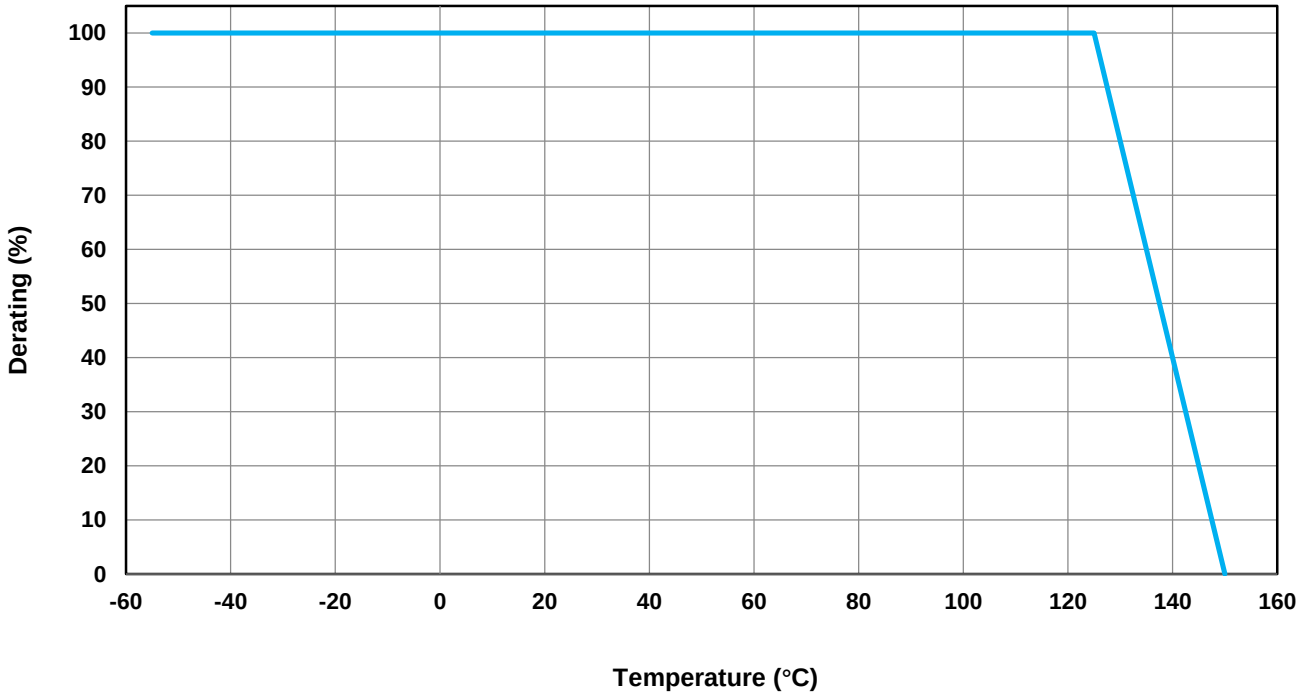
MSL 1

Pb Free 260°C

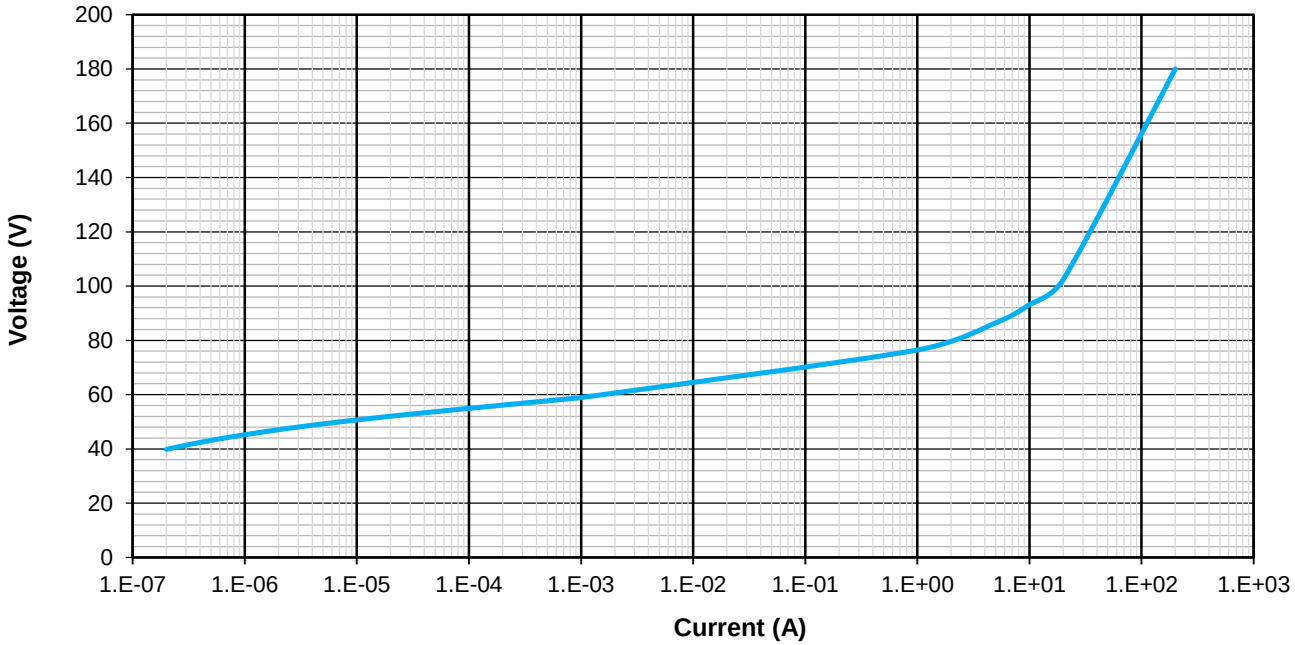
How to order (Packaging options)

CG21	AS	45	K	105	M	R	
Style	Automotive Series	Working Voltage	Energy Rating	Capacitance	Tolerance	Leads	Packaging
		45 = 45Vdc	K = 0.6J	105 = 0.018µF	M = +100/-50%	R = RoHS Compliant	Blank = Bulk (1,000pcs) TR1 = T&R Standard 1 (3,000pcs) TR2 = T&R Standard 2 (3,000pcs)

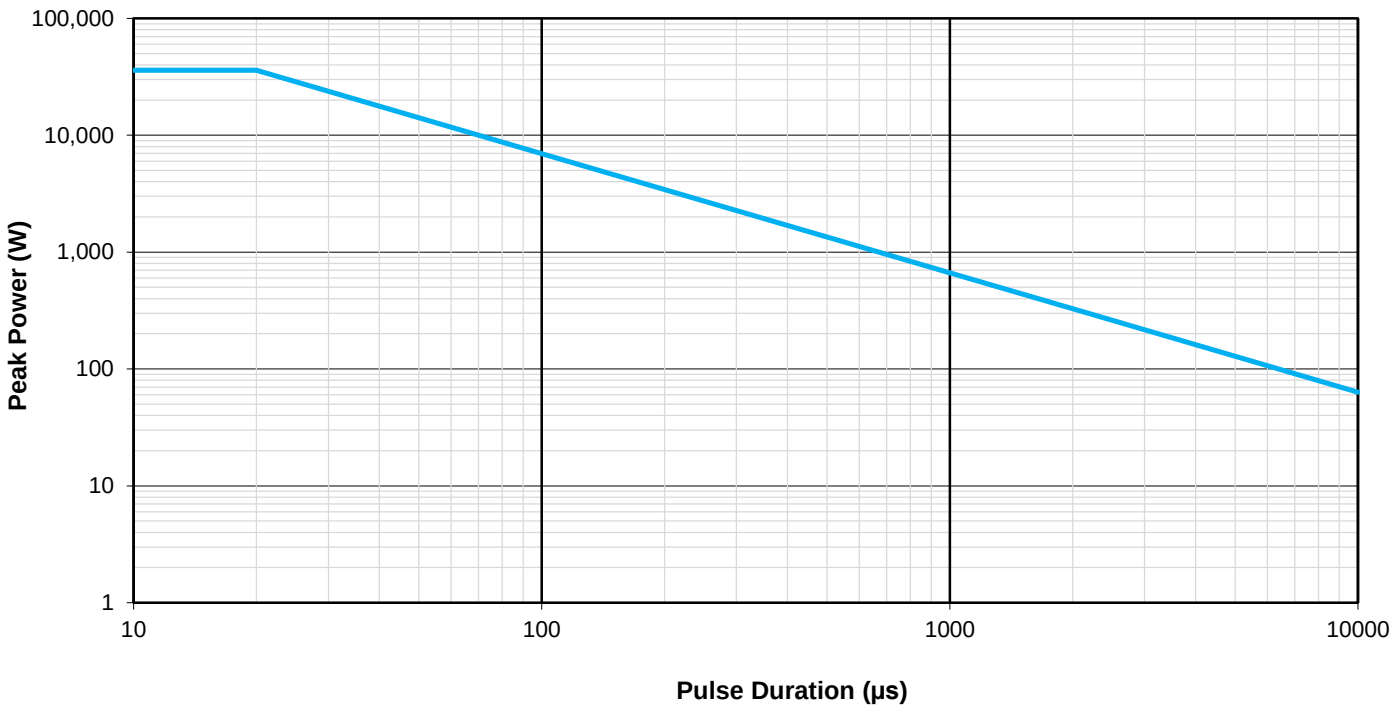
Typical Energy Derating Curve (Transient Energy, Peak Current, Power)



Voltage / Current 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.