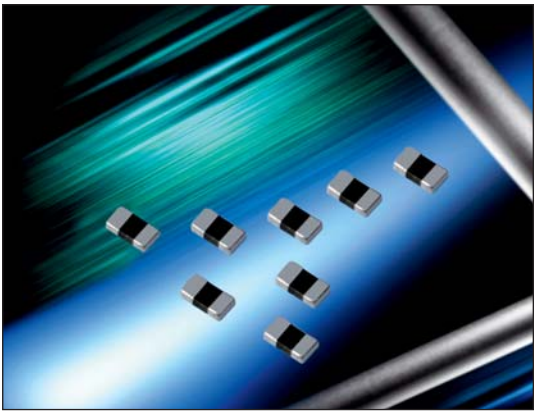


Controlled Capacitance Multilayer Varistor



GENERAL DESCRIPTION

The Controlled Capacitance TransGuard is an application specific bi-directional transient voltage suppressor developed for use in mixed signal environments. The Controlled Cap MLV has three purposes: 1) reduce emissions from a high speed ASIC, 2) prevent induced E fields from conducting into the IC, and 3) clamp transient voltages

By controlling capacitance of the MLV, the center frequency and 20db range for filtering purposes can be targeted. A Controlled Cap MLV can greatly improve overall system EMC performance and reduce system size.

Operating Temperature: -55°C to +125°C

HOW TO ORDER

VCAC	0603	22	A	470	N	R	P
Varistor Chip Automotive Capacitance	Chip Size 0603	Working Voltage 22 = 22V 26 = 26V	Energy Rating A = 0.1J C = 0.3J	Capacitance 470 = 47pF 820 = 82pF	Tolerance N = ±30% M = ±20%	Packaging R = 4k pcs	Termination P = Ni Barrier/ 100% Sn (matte)



AVX Part Number	V _w (DC)	V _w (AC)	V _B	V _C	I _L	E _T	I _P	Cap	Cap Tolerance	Case Size
VCAC060322A470NRP	22	17	32.5±25%	50	10	0.1	30	47	30%	0603
VCAC060326C820MRP	26	20	36.0±15%	67	10	0.3	30	82	20%	0603

V_w(DC) DC Working Voltage [V]

V_w(AC) AC Working Voltage [V]

V_B Breakdown Voltage [V @ 1mA_{DC}]

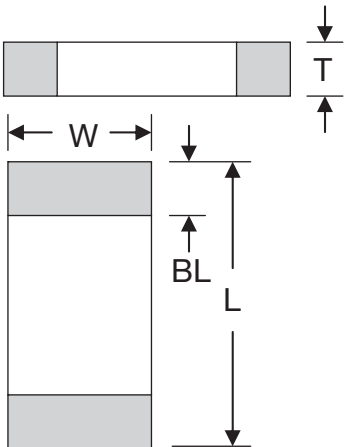
V_C Clamping Voltage [V @ 1A]

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 Capacitance [pF] @ 1KHz specified and 0.5V_{RMS}



0603 Discrete Dimensions

mm (inches)

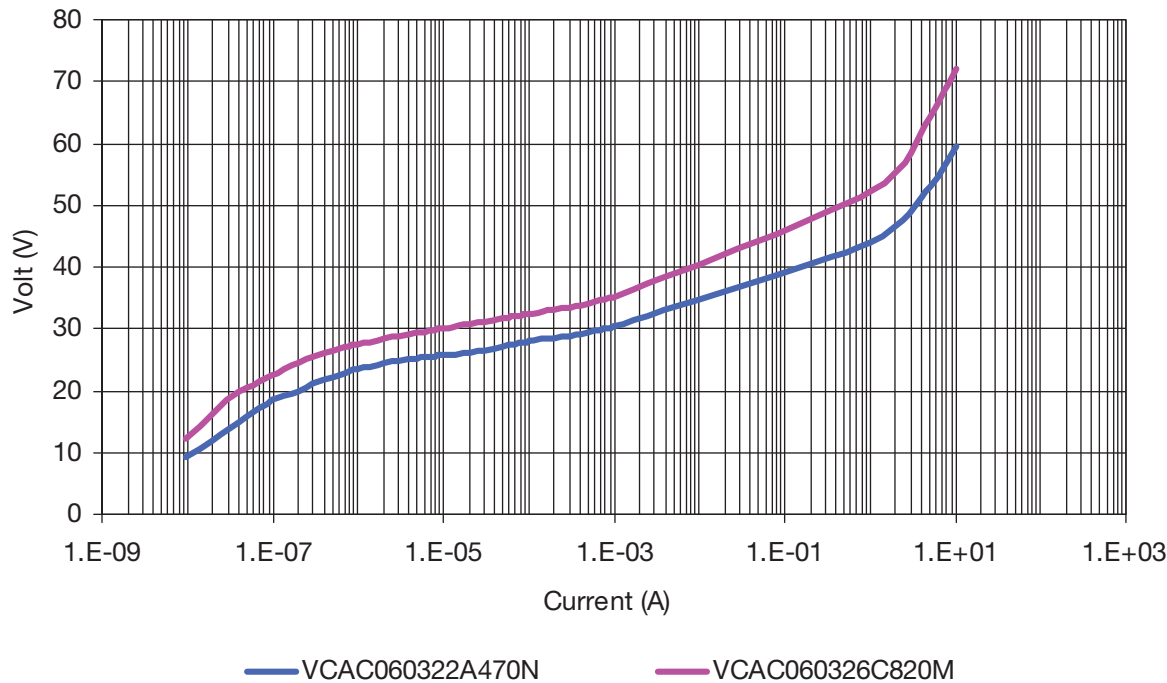
L	W	T	BW	BL
1.60±0.15 (0.063±0.006)	0.80±0.15 (0.031±0.006)	0.90 MAX (0.035 MAX)	N/A	0.35±0.15 (0.014±0.006)



Controlled Capacitance Multilayer Varistor



V-I Curve



S21

