

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number: VCAC060322A470NRP
Manufacturer: KYOCERA AVX
Package: 0603 (1608 Metric)
Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/kyocera-avx/vcac060322a470nrp.html>

Request a Quote:

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Quality & Trust

New & Original Components

Supplier verification and packaging condition review

CoC / RoHS / REACH documents available on request

Secure sourcing support for OEM / EMS projects

Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

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.

GENERAL CHARACTERISTICS

- Operating Temperature: -55°C to +125°C
- Working Voltage: 9 - 30Vdc
- Case Size: 0402, 0603

FEATURES

- Single Chip Solution
- Targeted EMI/RFI Filtering
- 20dB Range for filtering purposes
- Improves system EMC performance
- Very fast response to ESD
- 25kV ESD

APPLICATIONS

- EMI TVS Module Control
- High Speed ASICS
- Mixed Signal Environment
- Sensors and more

HOW TO ORDER

VCAC	0603	22	A	470	N	R	P
Varistor Chip Automotive Capacitance	Chip Size 0402 0603	Working Voltage 09 = 9V 17 = 17V 22 = 22V 26 = 26V 30 = 30V	Energy Rating X = 0.05J A = 0.1J B = 0.2J C = 0.3J	Capacitance 15 = 15pF 330 = 33pF 380 = 38pF 470 = 47pF 820 = 82pF 102 = 1000pF	Tolerance N = ±30% M = ±20%	Packaging R = 4k pcs D = 7" reel (1,000 pcs) R = 7" reel (4,000 pcs) T = 13" reel (10,000 pcs) W = 7" Reel (10,000 pcs 0402 only)	Termination P = Ni Barrier/ 100% Sn (matte)



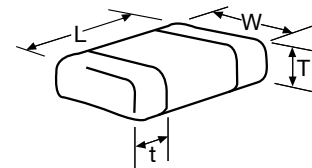
Part Number	VW (DC)	VW (AC)	VB	VC	IL	ET	IP	Cap	Cap Tolerance	Case Size
VCAC060309B102N	9.0	6.4	12.7±15%	22	25	0.2	120	1000	±30%	0603
VCAC060317X150N	17	12	27±20%	52	10	0.05	2	15	±30%	0603
VCAC060317X330M	17	12	27±20%	52	10	0.05	2	33	±20%	0603
VCAC060322A470N	22	17	32.5±25%	50	10	0.1	30	47	30%	0603
VCAC060326C820M	26	20	36.0±15%	67	10	0.3	30	82	20%	0603
VCAC040230X380N	30	21	41±10%	67	5	0.05	10	38	±30%	0402

VW(DC)	DC Working Voltage [V]	I _L	Maximum leakage current at the working voltage, 25°C [μA]
VW(AC)	AC Working Voltage [V]	E _T	Transient Energy Rating [J, 10x1000μs]
VB	Breakdown Voltage [V @ 1mA]	I _p	Peak Current Rating [A, 8x20μs]
VC	Clamping Voltage [V @ 1A]	Cap	Capacitance [pF] @ 1KHz specified and 0.5VRMS, 25°C

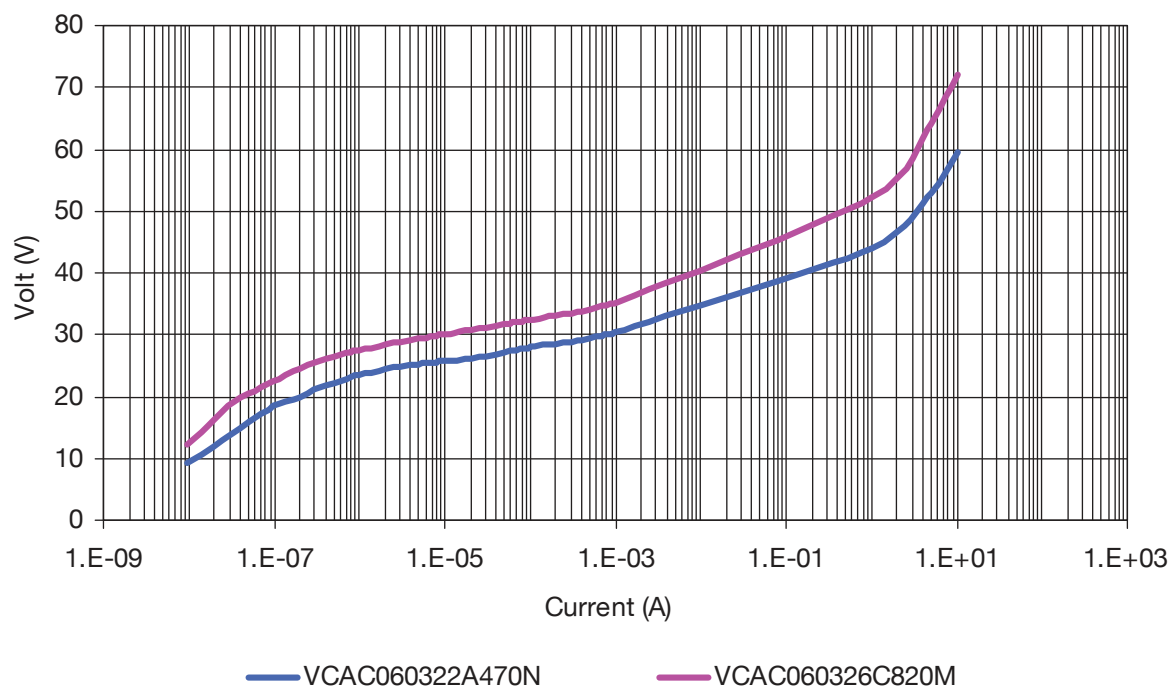
0603 DISCRETE DIMENSIONS

mm (inches)

Size (EIA)	Length (L)	Width (W)	Max Thickness (T)	Land Length (t)
0402	1.00±0.10 (0.040±0.004)	0.50±0.10 (0.020±0.004)	0.60 (0.024)	0.25±0.15 (0.010±0.006)
0603	1.60±0.15 (0.063±0.006)	0.80±0.15 (0.031±0.006)	0.90 (0.035)	0.35±0.15 (0.014±0.006)



V-I Curve



S21

