48V SYSTEM VARISTORS

AUTOMOTIVE-GRADE TRANSIENT VOLTAGE SUPPRESSORS

Click Here to View the 48V Varistors Datasheet

BASIC OVERVIEW

KYOCERA AVX Automotive Series Varistors provide reliable protection against automotive-related transients such as Load Dump, Jump Start, and ESD to protect the growing number of electronic systems used in automotive applications.

The new 48V System Varistors are designed, manufactured, and tested to be used in 48-volt power supply systems, with operating temperatures up to 150°C.

GENERAL CHARACTERISTICS

The 48V System Varistors are Zinc Oxide based ceramic semiconductor devices with bi-directional overvoltage protection as well as EMI/RFI attenuation in a single SMT package.

These varistors are qualified to AEC-Q200 as well as tested to VDA-320, which covers electronic components in vehicles with a 48V power supply.

Sizes available are EIA chip sizes 0805 through 2220.

APPLICATIONS

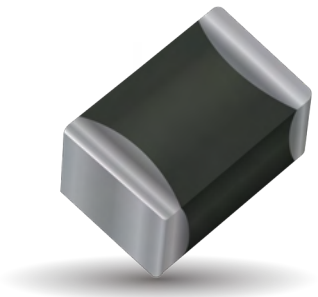
- Automotive & Transportation
- Electric Vehicles
- EV Charging
- DC Motors
- Relays
- ESD Protection
- Load Dump

KEY SPECIFICATIONS

- Sizes: 0805 – 2220
- Working Voltage: 56V
- Jump Start: 48V
- Capacitance: 80 – 2800 pF
- Operating Temperature: -55°C to +150°C

TOP SELLING POINTS / CHARACTERISTICS

- Designed for 48V Power Supply Systems
- AEC-Q200 Qualified
- High Reliability and Multiple Strike Protection
- Small, Standard EIA, Case Sizes
- Easy installation



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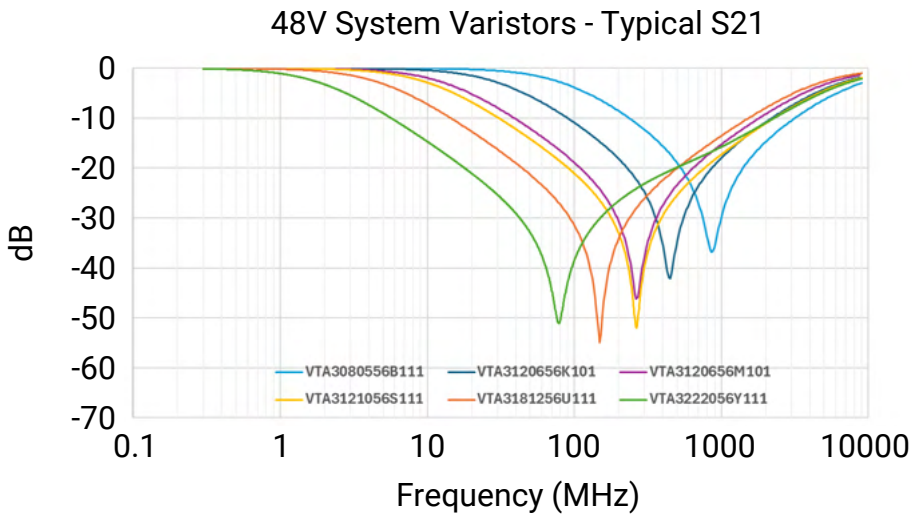
IMMEDIATELY AVAILABLE PART NUMBERS

Part Number	Size	V_W (DC)	V_W (AC)	V_B (V)	V_C (V)	I_{vc} (DA)	I_L (µA)	E_T (J)	E_{LD} (J)	I_P (A)	Cap (pF)	Freq.	Jump Start (V)	$P_{Diss\ Max.}$ (W)
VTA3080556B111	0805	56	40	68±10%	110	1	10	0.2	0.25	30	80	K	48	0.004
VTA3120656K101	1206	56	40	68±10%	100	1	10	0.6	0.8	200	200	K	48	0.014
VTA3120656M101	1206	56	40	68±10%	100	1	10	1.0	2	200	500	K	48	0.018
VTA3121056S111	1210	56	40	68±10%	110	2.5	10	2.0	3	250	600	K	48	0.030
VTA3181256U111	1812	56	40	68±10%	110	5	10	4.8	5	1500	1500	K	48	0.080
VTA3222056Y111	2220	56	40	68±10%	110	10	10	9.0	14	1000	2800	K	48	0.150

Vw (DC/AC) Working Voltage (V)
Vb Min/Max Breakdown Voltage [V @ 1 mADVC, 25°C]
Vc Clamping Voltage [V @ IVC]
I_{vc} Test Current for VC [A, 8x20uS]
I_L Maximum Leakage Current at the Working Voltage [uA, 25°C]
I_P Peak Current Rating [A, 8x20uS]
E_T Transient Energy Rating [J, 10x1000uS]
E_{LD} Load Dump Energy



For more information, please contact us at circuitprotection@kyocera-avx.com.

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