Axial TransGuard® and StaticGuard



Axial Multilayer Ceramic Transient Voltage Suppressors



GENERAL DESCRIPTION

Axial TransGuard® multilayer varistors are zinc oxide (ZnO) based ceramic semiconductor devices with nonlinear voltage-current characteristics (bi-directional) similar to back-to-back zener diodes. They have the added advantage of greater current and energy handling capabilities as well as EMI/RFI attenuation.

Axial StaticGuard is low capacitance version of the TransGuard and are designed for general ESD protection of CMOS, Bi-Polar, and SiGe based systems.

KYOCERA AVX Axial varistors are designed for applications where leaded component is prefered and for durability in harsh environment.

RoHS

COMPLIANT

GENERAL CHARACTERISTICS

- Operating Temperatures: -55°C to +125°C
- Working Voltage: 3.3 60Vdc
- Case Size: Axial
- Energy: 0.1 2.0J
- · Peak Current: 30 300A

FEATURES

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- Axial leaded, epoxy encapsulated
- Fast Response
- EMI/RFI filtering in the off-state
- · Multiple strikes capability

APPLICATIONS

- White Goods
- Industrial Equipment
- Sensors
- Relays
- DC Motors
- and more

HOW TO ORDER - AXIAL TRANSGUARD®

VA	1000	26	D	400		
		Т	Т	\top		
Varistor	Case	Voltage	Energy	Clamping		
Axial	Size	03 = 3.3Vdc	Rating	Voltage		
	1000	05 = 5.6Vdc	A = 0.1J	100 = 12V		
	2000	14 = 14Vdc	D = 0.4J	150 = 18V		
		18 = 18Vdc	K = 0.6J	300 = 32V		
		26 = 26Vdc		400 = 42V		
		30 = 30Vdc		580 = 60V		
		48 = 48Vdc		650 = 67V		
		60 = 60Vdc		101 = 100V		
				121 = 120V		

Т
Termination
L = Ni/Sn plated

Packaging (Pcs/Reel:								
STYLE	D	R	Т					
VA1000	1,000	3,000	7,500					
VA2000	1,000	2,500	5,000					

L

HOW TO ORDER - AXIAL STATICGUARD



Axial Multilayer Ceramic Transient Voltage Suppressors

AXIAL TRANSGUARD®

Part Number	V _w (DC)	V _w (AC)	V _B	V _c	I _{vc}	I _L	Ε _τ	I _P	Сар	Freq	Case
VA100003A100	3.3	2.3	5.0±20%	12	1	100	0.1	40	1500	к	1000
VA100003D100	3.3	2.3	5.0±20%	12	1	100	0.4	150	4700	к	1000
VA100005A150	5.6	4.0	8.5±20%	18	1	35	0.1	40	1000	к	1000
VA100005D150	5.6	4.0	8.5±20%	18	1	35	0.4	150	2800	К	1000
VA100014A300	14.0	10.0	18.5±12%	32	1	15	0.1	40	325	к	1000
VA100014D300	14.0	10.0	18.5±12%	32	1	15	0.4	150	1100	к	1000
VA100018A400	18.0	13.0	25.5±10%	42	1	10	0.1	40	350	К	1000
VA100018D400	18.0	13.0	25.5±10%	42	1	10	0.4	150	900	К	1000
VA100026D580	26.0	18.0	34.5±10%	60	1	10	0.4	120	650	к	1000
VA100030D650	30.0	21.0	41.0±10%	67	1	10	0.4	120	550	к	1000
VA100048D101	48.0	34.0	62.0±10%	100	1	10	0.4	100	200	К	1000
VA200060K121	60.0	42.0	76.0±10%	120	1	10	2.0	300	400	К	2000

AXIAL STATICGUARD

Part Number	V _w (DC)	V _w (AC)	V _B	V _c	I _{vc}	I _L	Ε _τ	l _p	Сар	Freq	Case
VA10LC18A500	≤18.0	≤14.0	25-40	50	1	10	0.1	30	200	К	1000

- $V_w(DC)$ DC Working Voltage [V]
- $V_w(AC)$ AC Working Voltage [V]

 V_{B}^{W} Typical Breakdown Votage (V @ 1mA_{DC})

 $V_{_{\rm B}}$ Tol $V_{_{\rm B}}$ Tolerance is ± from Typical Value

 V_c Clamping Voltage (V @ I_{vc})

 I_{vc} Test Current for V_c (A, 8x20µS)

 I_L Maximum Leakage Current at the Working Voltage (µA)



DIMENSIONS:

mm (inches)

Style		VA1000	VA2000		
(L) Max Length	mm	4.32	4.83		
	(in.)	(0.170)	(0.190)		
(D) Max Diameter	mm	2.54	3.56		
	(in.)	(0.100)	(0.140)		

Lead Finish: Copper Clad Steel, Solder Coated

The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.



 $E_{_T}$ Transient Energy Rating (J, 10x1000µS)

I_P Peak Current Rating (A, 8x20µS)

Cap Typical Capacitance (pF) @ frequency specified and 0.5 V_{RMS}

Freq Frequency at which capacitance is measured (K = 1kHz, M = 1MHz)