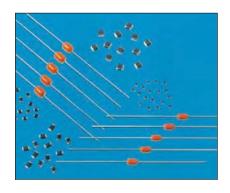
# **Axial TransGuard® and StaticGuard**



## **AVX Axial Multilayer Ceramic Transient Voltage Suppressors**



#### **GENERAL DESCRIPTION**

Axial TransGuard® multilayer varistors are zinc oxide (ZnO) based ceramic semiconductor devices with non-linear 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.

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

#### **GENERAL CHARACTERISTICS**

• Operating Temperatures: -55°C to +125°C

• Working Voltage: 3.3 - 60Vdc

Case Size: AxialEnergy: 0.1 - 2.0JPeak Current: 30 - 300A

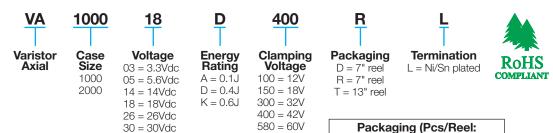
#### **FEATURES**

- 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®**



48 = 48VQC	000 = 07 V	STYLE	D	K	l I
60 = 60 Vdc		VA1000	1,000	3,000	7,500
	121 = 120V	VA2000	1,000	2,500	5,000

#### **HOW TO ORDER - AXIAL STATICGUARD**





# **Axial TransGuard® and StaticGuard**



## **AVX Axial Multilayer Ceramic Transient Voltage Suppressors**

#### **AXIAL TRANSGUARD®**

AVX PN	V <sub>w</sub> (DC)	V <sub>w</sub> (AC)	<b>V</b> <sub>B</sub>	<b>V</b> c	I <sub>vc</sub>	I <sub>L</sub>	E <sub>T</sub>	I <sub>P</sub>	Cap	Freq	Case
VA100003A100	3.3	2.3	5.0±20%	12	1	100	0.1	40	1500	K	1000
VA100003D100	3.3	2.3	5.0±20%	12	1	100	0.4	150	4700	K	1000
VA100005A150	5.6	4.0	8.5±20%	18	1	35	0.1	40	1000	K	1000
VA100005D150	5.6	4.0	8.5±20%	18	1	35	0.4	150	2800	K	1000
VA100014A300	14.0	10.0	18.5±12%	32	1	15	0.1	40	325	K	1000
VA100014D300	14.0	10.0	18.5±12%	32	1	15	0.4	150	1100	K	1000
VA100018A400	18.0	13.0	25.5±10%	42	1	10	0.1	40	350	K	1000
VA100018D400	18.0	13.0	25.5±10%	42	1	10	0.4	150	900	K	1000
VA100026D580	26.0	18.0	34.5±10%	60	1	10	0.4	120	650	K	1000
VA100030D650	30.0	21.0	41.0±10%	67	1	10	0.4	120	550	K	1000
VA100048D101	48.0	34.0	62.0±10%	100	1	10	0.4	100	200	K	1000
VA200060K121	60.0	42.0	76.0±10%	120	1	10	2.0	300	400	K	2000

#### **AXIAL STATICGUARD**

AVX PN	V <sub>w</sub> (DC)	V <sub>w</sub> (AC)	V <sub>B</sub>	V <sub>c</sub>	I <sub>vc</sub>	I <sub>L</sub>	E <sub>T</sub>	I <sub>P</sub>	Сар	Freq	Case
VA10LC18A500	≤18.0	≤14.0	25-40	50	1	10	0.1	30	200	K	1000

 $V_w(DC)$  DC Working Voltage (V)

V<sub>w</sub>(AC) AC Working Voltage (V)

V<sub>B</sub> Typical Breakdown Voltage (V @ 1mA<sub>DC</sub>)

 $V_{\scriptscriptstyle B}$  ToI  $V_{\scriptscriptstyle B}$  Tolerance is  $\pm$  from Typical Value  $V_{\scriptscriptstyle C}$  Clamping Voltage (V @  $I_{\scriptscriptstyle VC}$ )

 $I_{vc}$  Test Current for  $V_c$  (A, 8x20 $\mu$ S)

I<sub>L</sub> Maximum Leakage Current at the

Working Voltage (µA)

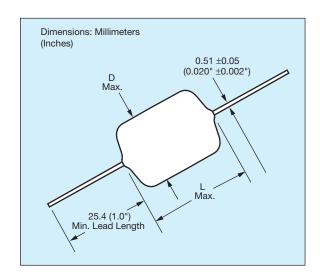
 $E_T$  Transient Energy Rating (J, 10x1000µS)  $I_P$  Peak Current Rating (A, 8x20µS)

Cap Typical Capacitance (pF) @ frequency specified

and 0.5  $V_{\text{RMS}}$ 

Freq Frequency at which capacitance is measured

(K = 1kHz, M = 1MHz)



### **DIMENSIONS:** mm (inches)

AVX 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

