Radial Leaded High Temp. Automotive TransGuard®

150°C Rated Radial Leaded Varistors





GENERAL DESCRIPTION

KYOCERA AVX High Temperature Multi-Layer Varistors are designed for underhood applications. Products have been tested, qualified, and specified to 150°C. The Radial Leaded TransGuard is built for durability in harsh environments. The MLV advantage is EMI/RFI attenuation in the off state. This allows designers to combine the circuit protection and EMI/RFI attenuation function into a single highly reliable device.

GENERAL CHARACTERISTICS

• Operating Temperatures:

- -55°C to +150°C
- Working Voltage: 14-48Vdc

FEATURES

- Rated at 150°C
- AEC Q200 qualified
- ESD rated to 25kV (HBM ESD Level 6)
- EMI/RFI attenuation in off state
- Excellent current and energy handling

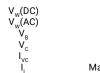
HOW TO ORDER

VR15	AT	18	Α	650	R	TR2	
	T	Т	Т	T	Т	T	
Style VR15	Series AT = 150°C	Voltage 14 = 14V	Energy A = 0.1J	Clamping Voltage	Leads R = RoHS	Packaging Blank = Bulk	RoHS
VR15 VR20	Automotive	18 = 18V	D = 0.4J	580 = 60V	Compliant	TR1 = T&R Standard 1	COMPLIANT
		26 = 26V 48 = 48V	S = 2.0J	650 = 67V 101 = 100V		TR2 = T&R Standard 2	

151 = 150V

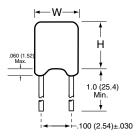
ELECTRICAL CHARACTERISTICS

Part Number	V _{WDC}	V _{wac}	V _B	V _c	I _{vc}	Ι	Ε _τ	ELD	I _P	Сар	Freq	V _{JUMP}	P _{DISS}
VR15AT14A580	14.0	10.0	34.5±10%	60	1	10	0.1	0.15	30	120	K	27.5	0.002
VR15AT18A650	18.0	13.0	41.0±10%	67	1	10	0.1	0.15	30	90	М	29	0.002
VR20AT26D101	26.0	18.0	62.0±10%	100	1	10	0.4	1.5	100	225	K	48	0.008
VR20AT48S151	48.0	34.0	100.0±10%	150	1	10	2.0	3.5	250	275	K	48	0.040



DC Working Voltage [V] AC Working Voltage [V] Typical Breakdown Votage [V @ 1mA_{DC}] Clamping Voltage [V @ I_{IV}] Test Current for V_C Maximum leakage current at the working voltage [µA] E_t E_{LD} I_P Cap V_{Jump} P_{DISS} Transient Energy Rating [J, 10x1000µS] Load Dump Energy (x10) [J] Peak Current Rating [A, 8x20µS] Typical capacitance [pF] @ frequency specified and 0.5V_{RMS} Jump Start (V) Power Dissipation (W)

PHYSICAL DIMENSIONS



mm (inches)								
Style	Width (W)	Height (H)	Thickness (T)	Lead Spacing	Lead Diameter			
VR15	4.32 Max.	3.81 Max.	2.54 Max.	2.54	0.508			
	(0.170)	(0.150)	(0.100)	(0.100)	(0.020)			
VR20	5.59 Max	5.08 Max	3.175 Max	2.54	0.508)			
	(0.220)	(0.200)	(0.125)	(0.100)	(0.020			

- Under hood
 - Down Hole Drilling

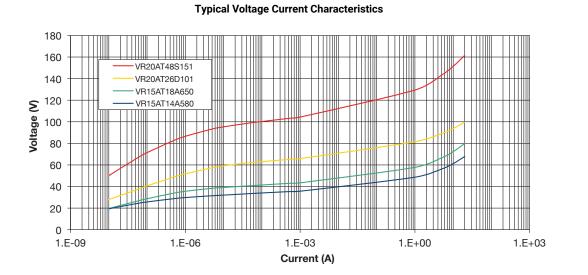
APPLICATIONS

- DC Motors
- Relays
- Inductive Loads
- High Temperature/ Harsh environment and more

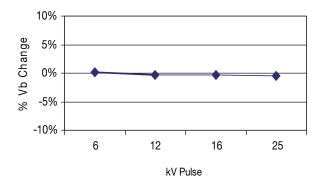
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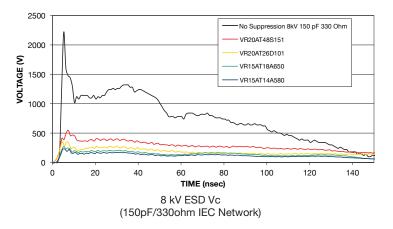




AEC-Q200-002 ESD Characteristics

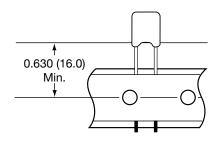


ESD Wave Absorption Characteristics

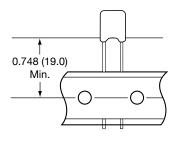


TAPE & REEL PACKAGING OPTIONS









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