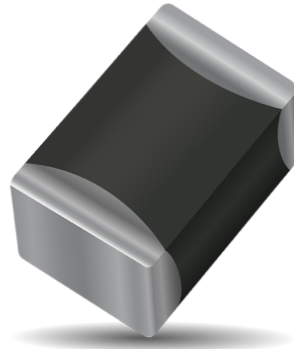




Scan QR Code For More Information

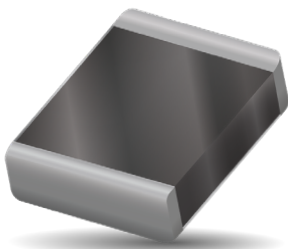
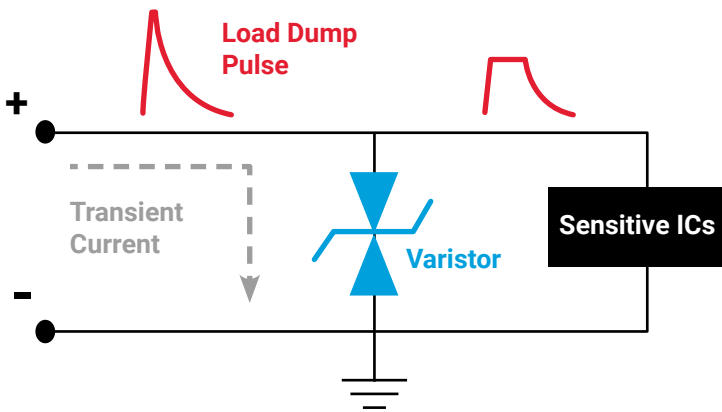
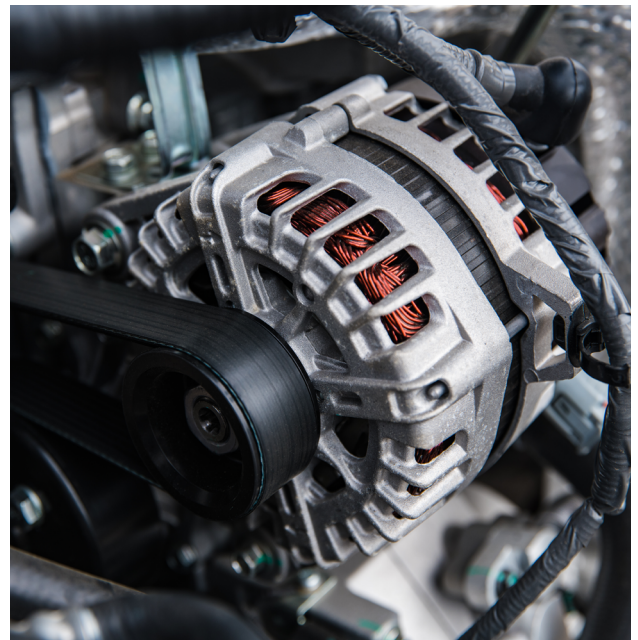
LOAD DUMP VARISTORS



GENERAL DESCRIPTION

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, and in addition, these are AEC-Q200 qualified.

Load Dump pulses simulate a sudden battery disconnection from the alternator. Because of the loss of the battery load, the alternator generates an overvoltage impulse. Such Load Dump pulses are high-energy pulses that can damage sensitive ICs.



Available with Glass Coating for Harsh Environments

ADVANTAGES

- High Reliability
- Fast Response
- High Energy Absorption
- High Current Handling
- No Temperature Derating up to 125°C
- EMI/RFI Attenuation
- Smaller Footprint
- Bi-Directional
- Lighter Weight
- JASO D001 1994
- AEC Q200 Qualified
- ISO-16750-2:2010

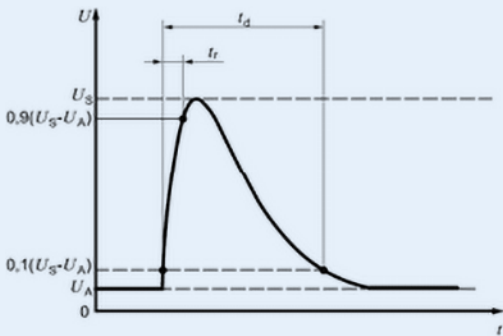
LOAD DUMP VARISTORS



KYOCERA AVX VARISTOR LOAD DUMP OFFERING

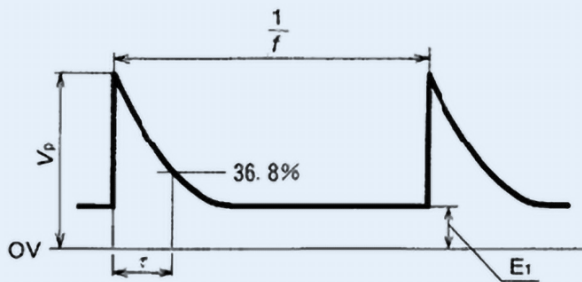
Part Number	Working Voltage	Breakdown Voltage		Clamping Voltage @ 10A	Current Leakage @ V _{DC}	Capacitance	Peak Current	Jump Start	Transient Energy	Load Dump Energy
	V _{DC} (V)	V _B Min (V)	V _B Max (V)	V _C (V)	I _L (μA)	Cap (nF)	I _P (A)	V _{jump} (V)	E _T (J)	E _{LD} (J)
VCAS222016W400	16	22.05	26.95	42	15	20	2000	27.5	7.6	20
VCAS222016Y390	16	22.05	26.95	40	15	25	2000	27.5	10.2	37
VCAS222016Z400	16	22.05	26.95	42	15	28	2000	27.5	16.0	45

ISO 16750-2:2010



U _S ^a V	79 ≤ U _S ≤ 101	10 pulses at intervals of 1 min
R _i ^a Ω	0.5 ≤ R _i ≤ 4	
t _d ms	40 ≤ t _d ≤ 400	
t _r ms	10 (-)	

JASO D001-1994



Type of test	Test conditions					Number of pulses	
	V _p (V)	τ (μs)	f(Hz)	R _i (Ω)	Wave-form		
TypeA	A-1	70	200,000	—	0.8	Fig. 5 and Fig. 6	1 pulse
	A-2	110	2.5	—	0.4		Fig.6
TypeB	B-1	—	80	60,000	1/30	Fig. 7	Fig.8
	B-2	—	260	2,000	80		

LOAD DUMP ISO 16750-2 CAPABILITY

VCAS222016W400	0.5 Ω	1 Ω	4 Ω
100 ms	62 V	80 V	172 V
400 ms	48 V		90 V

VCAS222016Y390	0.5 Ω	1 Ω	4 Ω
100 ms	78 V	105 V	213 V
400 ms	51 V		128 V

LOW ENERGY SOLUTION

COMPARABLE TO VGAS22016Y390