AK10 Series

The new AK10 series of high current transient suppressors have been specially designed for use in A.C. Line Protection and any demanding applications (AC or DC).They offer superior clamping characteristics over standard S.A.D. technologies by virtue of the Littelfuse Foldbak™ technology, which provides a clamping voltage which is lower than the avalanche voltage (but above the rated working voltage) therefore any voltage rise due to increased current conduction is contained to a minimum, providing the best possible protection level. They can also be connected in series and/or parallel to create very high capacity protection solutions.

Maximum Ratings

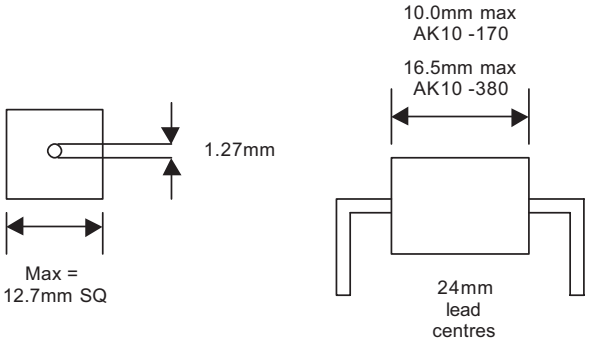
- Current Rating (I_{PP}) 10KA (see note 1)
- Maximum Junction Temp. is 150°C
- Storage Temp. -55°C to 175°C
- Rated I_{PP} measured with 8 x 20 µsec pulse

Mechanical Characteristics

- Epoxy Encapsulated
- Axial lead terminals (solderable per MIL-STD-202 Method 208)
- Device code and logo marked on every device

Features

- Foldbak™ technology for superior clamping factor.
- Glass Passivated Junction
- Bi-directional
- Multijunction
- Very Low Clamping Voltage
- Sharp Breakdown Voltage
- Low Slope Resistance



Agency Approvals: Recognized under the Components Program of Underwriters Laboratories - UL497B.

Agency File Numbers: E128662

ELECTRICAL SPECIFICATION @ Tamb 25°C

Part Numbers	Standoff Voltage (V_{SO}) Volts	Max. Reservse Leakage (I_R) @ V_{SO} µA	Reverse Breakdown Voltage (V_{BR}) @ I_T		Test Current (I_T)	Max. Clamping Voltage V_{CL}) @ Peak Pulse Current(I_{PP}) (note 1)		Max. Temp Coefficient OF V_{BR}	Max. Capacitance 0 Bias 10k Hz
			Min. Volts	Max. Volts	mA	V_{CL} Volts	I_{PP} Amps	(%/ ° C)	(nF)
AK10-58	58	20	64	70	10	95	10,000	0.1	8.0
AK10-170	170	20	180	220	10	260	10,000	0.1	2.8
AK10-190	190	20	200	245	10	290	10,000	0.1	2.5
AK10-250	250	20	245	270	10	420	10,000	0.1	2.0
AK10-380	380	20	401	443	10	520	10,000	0.1	1.4

Note 1. Using 8/20µS wave shape pulse as defined in IEC 61000.4.5

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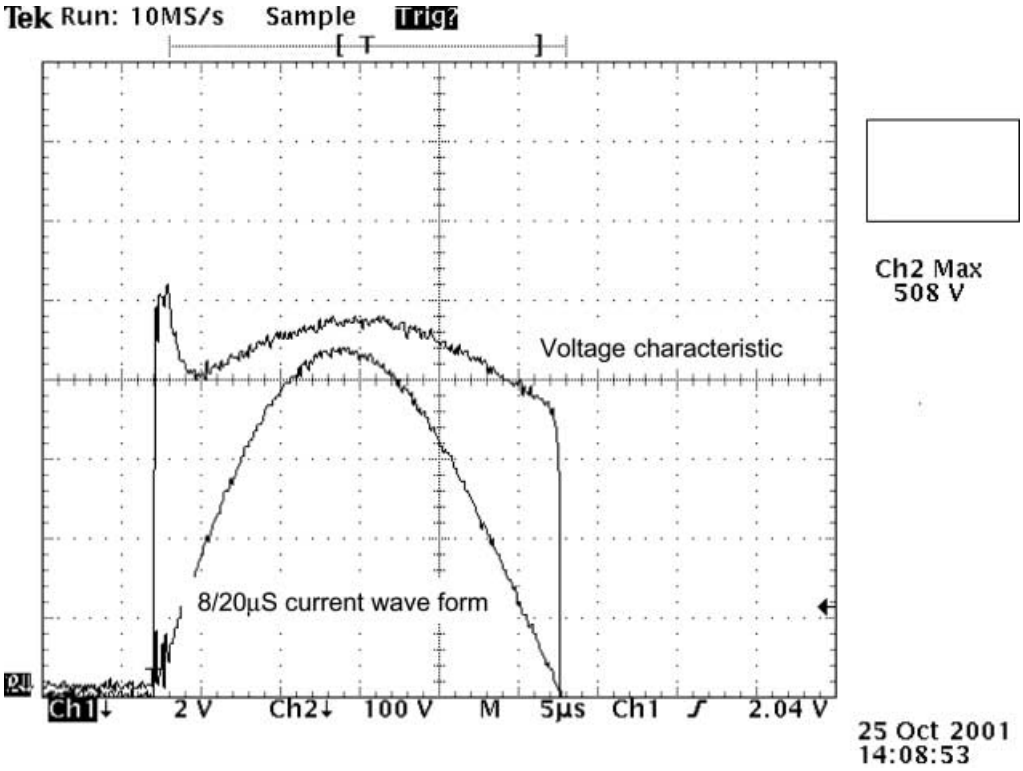

Oscilogram of AK10-380 volt device (422 volt breakdown) tested at maximum surge duty using 10,000 Amp 8/20µS wave form: maximum clamping voltage is 508 volts.