

# MDE Semiconductor, Inc.

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1-800-831-4881 Email: sales@mdesemiconductor.com Web: www.mdesemiconductor.com

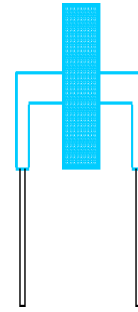
## MAX15KA Series

### HIGH CURRENT Power Transient Voltage Suppressor

Stand-Off Voltage 33 to 190 Volts

#### FEATURES

- Glass passivated junction
- Bi-directional
- RoHS Compliant
- 15000A surge capability at 8 x 20µsec waveform  
(per IEC-61000-4-5)
- Excellent clamping capability
- Coated Powder has UL  
Flammability Classification 94V-0
- Operating and storage Temp -40°C to  
+125°C



See Dimensions on Page 3

#### MECHANICAL DATA

Terminals: Ag Plated Axial leads, solderable per  
MIL-STD-750, Method 2026

Mounting Position: Any

Weight: 8.0 ± 1g (33 TO 76 Volts) 14.2 ± 1 g (190 Volts)

#### DEVICES FOR BIPOLAR APPLICATIONS

Bidirectional use C or CA Suffix. Electrical characteristics apply in both directions.

#### MAXIMUM RATINGS AND CHARACTERISTICS

Part Number	Stand Off Voltage (V <sub>so</sub> )	Max. Reverse Leakage (I <sub>R</sub> ) @V <sub>so</sub>	Reverse Breakdown Voltage (V <sub>BR</sub> ) @I <sub>T</sub> (Volts)		Test Current I <sub>T</sub>	Max. Clamping Voltage V <sub>CL</sub> @ Peak Pulse Current (I <sub>PP</sub> ) (Note 1)	
	Volts		Min.	Max.		mA	V <sub>CL</sub> Volts
MAX15KA-33CA	33	80	36.7	40.6	10	62	15,000
MAX15KA-54CA	54	10	60.0	66.3	10	101	15,000
MAX15KA-58CA	58	10	64.0	70.0	10	110	15,000
MAX15KA-66CA	66	10	72.0	80.0	10	120	15,000
MAX15KA-76CA	76	10	87.1	95.0	10	150	15,000
MAX15KA-190CA	190	10	200.0	245.0	10	290	15,000

NOTE 1 : Using 8x20µS Wave shape defined in IEC 61000-4-5

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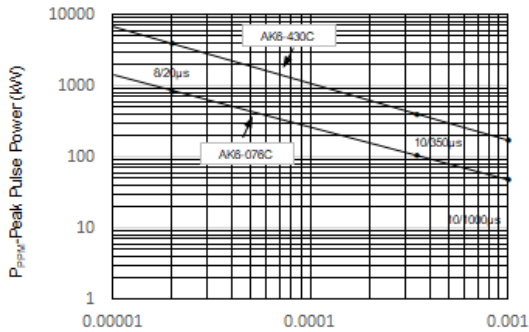
## MAX15KA Series

### Transient Voltage Suppressor

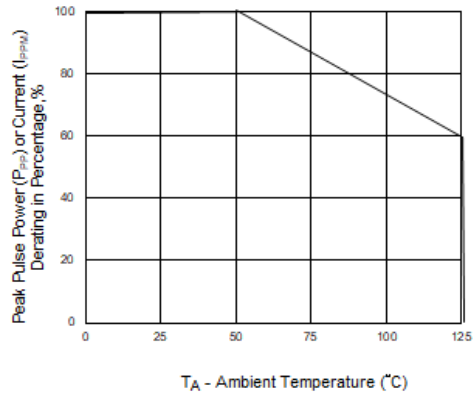
Stand-Off Voltage 33 to 190 Volts

#### Ratings and Characteristic Curves (TA=25°C unless otherwise noted)

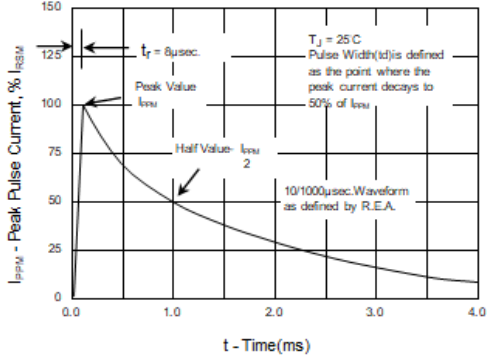
**Fig. 1 - Peak Pulse Power Rating**



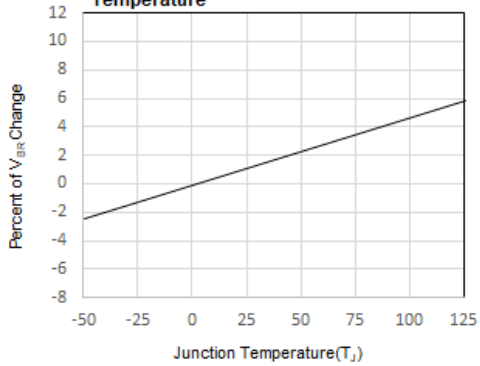
**Fig.2 - Pulse Derating Curve**



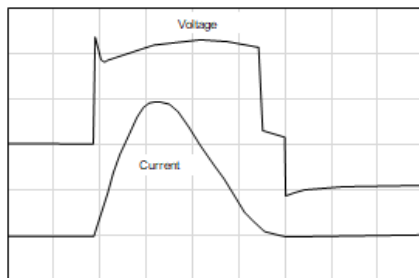
**Fig. 3 - Pulse Waveform**



**Fig. 4 - Typical V\_BR Vs Junction Temperature**

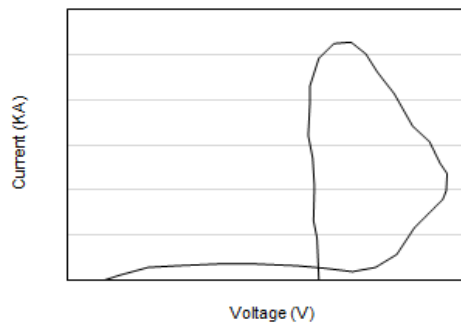


**Fig. 5 - Surge Response (8/20 μs waveform)**



Note :  
The powerdissipation causes a change in avalanche voltage during the surge and the avalanche voltage eventually returns to the original value when the transient has passed.

**Fig. 6 - Surge Response**



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Fig. 7 - Non Lead-free profile

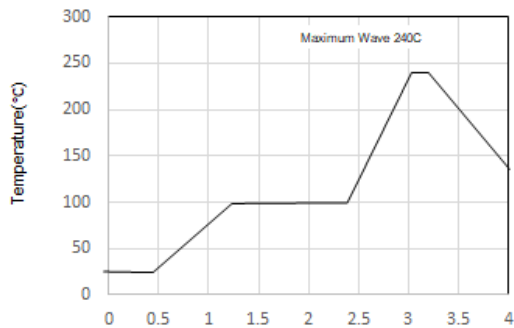
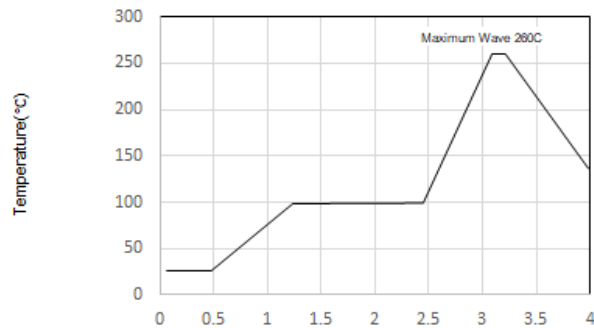


Fig. 8 - Lead-free profile



#### Dimensions

Dimensions	Inchs	Millimeters
A	0.950+/-0.028	24.15+/-0.72
B	0.049+/-0.019	1.25+/-0.05
C	0.630 max	16.0 max
D-33~76CA	0.354max	9.0 max
D-190CA	0.551 max	14.0 max
E	0.315 max	8.0 max
F	0.590 min	15.0 min

