

## AM 100/150 Thru AM1010/1510

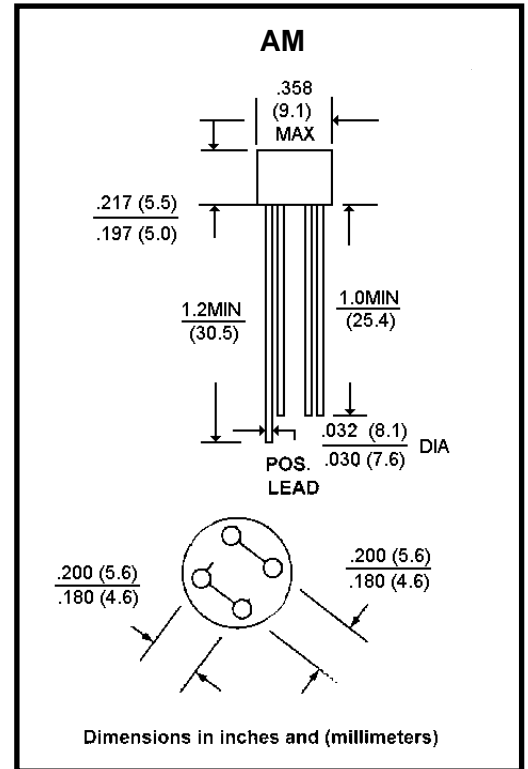
**Voltage: 50 - 1000 Volts**  
**Current: 1.0 - 1.5 Amp**

### Features

- Ratings to 1000VPRV
- Surge overload rating - 30/50 amperes peak
- Ideal for printed circuit board
- Reliable construction utilizing molded plastic
- Mounting position: Any

### Mechanical Data

- Case: Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Terminals: Lead solderable per MIL-STD-202, Method 208
- Polarity: Polarity symbols marking on body
- Weight: 0.05 ounce, 1.3 grams
- Available with 0.50 inch leads (P/N add suffix "S")



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, Resistive or inductive load.

For capacitive load, derate current by 20%.		AM100	AM101	AM102	AM104	AM106	AM108	AM1010	UNITS
		AM150	AM151	AM152	AM154	AM156	AM158	AM1510	
Maximum Recurrent Peak Reverse Voltage		50	100	200	400	600	800	1000	V
Maximum RMS Bridge input Voltage		35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		50	100	200	400	600	800	1000	V
AM100 Maximum Average Forward Rectified Current at T <sub>A</sub> = 50°C	AM100	1.0							A
	AM150	1.5							
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	AM100	30							A
	AM150	50							
Maximum Forward Voltage Drop per Bridge Element at 1.0A DC		1.0							V
Maximum Reverse Current at Rated T <sub>A</sub> = 25°C		10.0							uA
DC Blocking Voltage per element T <sub>A</sub> = 100°C		1.0							mA
I <sup>2</sup> t Rating for fusing ( t < 8.35ms)		10							A <sup>2</sup> S
Typical Junction capacitance per leg (Note 1) C <sub>J</sub>		24							pF
Typical Thermal resistance per leg (Note 2) R <sub>θJA</sub>		36							°C/W
Typical Thermal resistance per leg (Note 2) R <sub>θJL</sub>		13							
Operating Temperature Range T <sub>J</sub>		-55 to +125							°C
Storage Temperature Range T <sub>A</sub>		-55 to +150							°C

### NOTES:

- Measured at 1 MHz and applied reverse voltage of 4.0 Volts
- Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.47x 0.47" (12 x 12mm) copper pads

## Rating and Characteristic Curves (AM100/150 T HRU AM1010/1510)

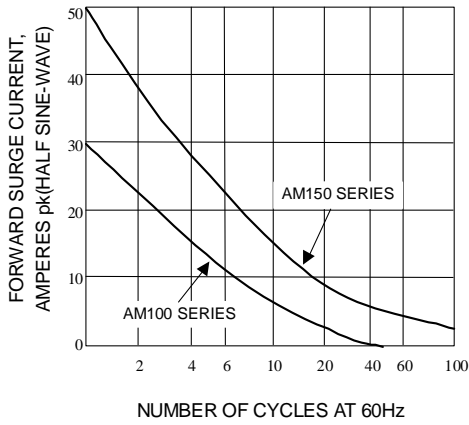


Fig. 1-MAXIMUM NON-REPETITIVE SURGE CURRENT

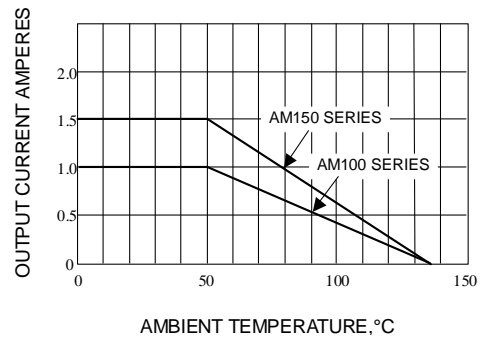


Fig. 2-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

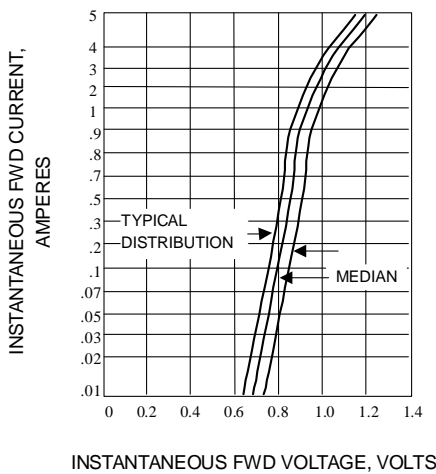


Fig. 3-TYPICAL FORWARD CHARACTERISTICS(25 °C)

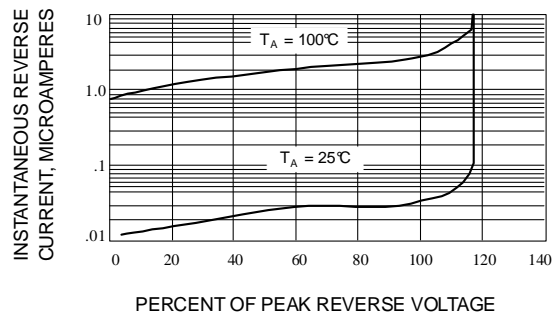


Fig. 4-TYPICAL REVERSE CHARACTERISTICS