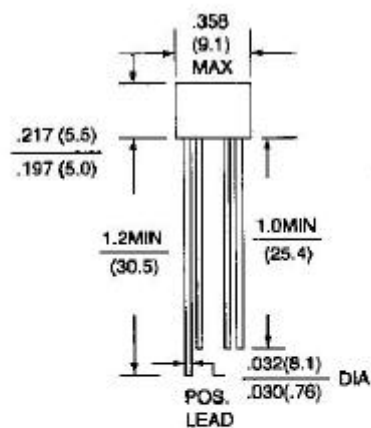


# AM100/150 THRU AM1010/1510

## 1.0 TO 1.5 AMPERE SILICON MINIATURE SINGLE-PHASE BRIDGE VOLTAGE - 50 to 1000 Volts CURRENT - 1.0~1.5 Amperes

### AM



### FEATURES

- Ratings to 1000V PRV
- 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 AM150	AM101 AM151	AM102 AM152	AM104 AM154	AM106 AM156	AM108 AM158	AM1010 AM1510	UNITS
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
Maximum Average Forward Rectified Current at T <sub>A</sub> =50	AM100	1.0						A
	AM150	1.5						
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	AM100	30.0						A
	AM150	50.0						
Maximum Forward Voltage Drop per Bridge Element at 1.0A DC	1.0						V	
Maximum Reverse Current at Rated T <sub>A</sub> = 25 DC Blocking Voltage per element T <sub>A</sub> =100	10.0						A	
	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>JA</sub>	36						/W	
Typical Thermal resistance per leg (Note 2) R <sub>JL</sub>	13							
Operating Temperature Range T <sub>J</sub>	-55 to +125							
Storage Temperature Range T <sub>A</sub>	-55 to +150							

NOTES:

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

RATING AND CHARACTERISTIC CURVES

AM100/150 THRU AM1010/1510

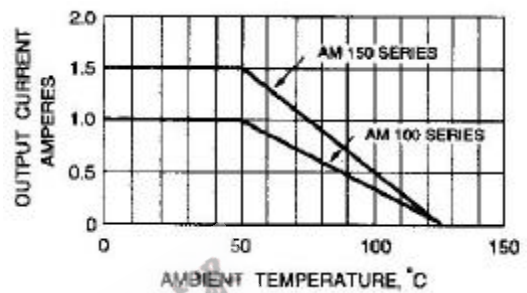
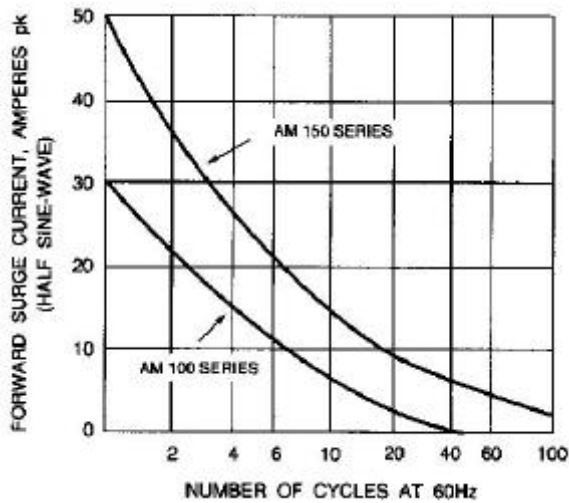


Fig. 1-MAXIMUM NON-REPETITIVE SURGE CURRENT Fig. 2-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

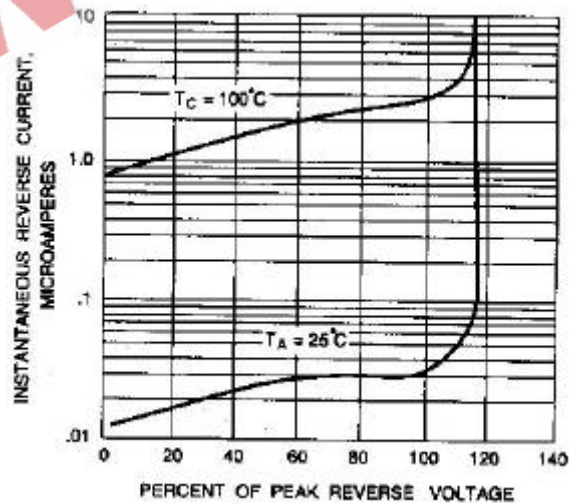
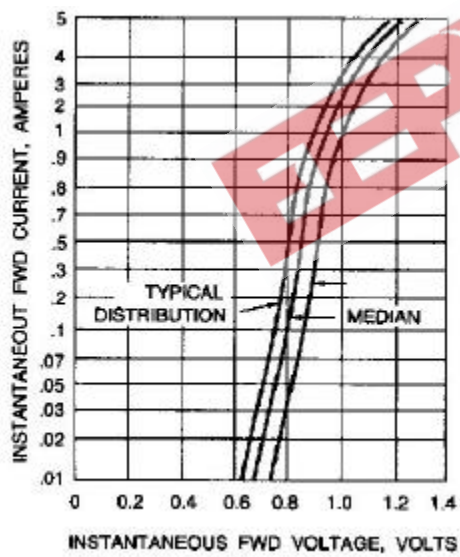


Fig. 3-TYPICAL FORWARD CHARACTERISTICS Fig. 4-TYPICAL REVERSE CHARACTERISTICS