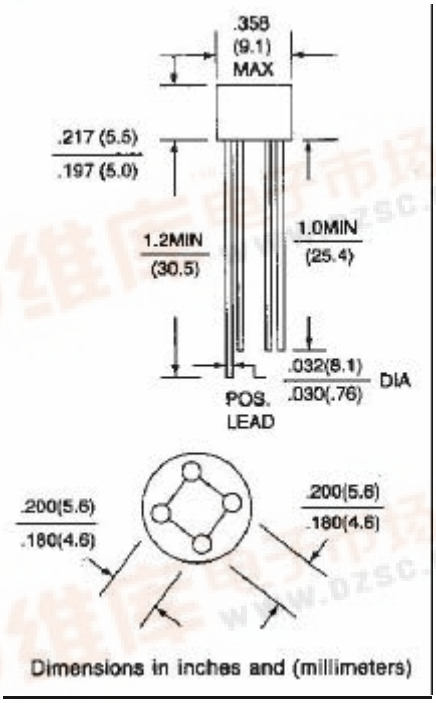
AM100/150 THRU AM1010/1510

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 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_A=50 AM100	1.0							A
Maximum Average Forward Rectified Current at T_A=50 AM150	1.5							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load AM100	30.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load AM150	50.0							A
Maximum Forward Voltage Drop per Bridge Element at 1.0A DC	1.0							V
Maximum Reverse Current at Rated T_A= 25	10.0							A
DC Blocking Voltage per element T_A=100	1.0							mA
I^2t Rating for fusing (t< 8.35ms)	10							A^2S
Typical Junction capacitance per leg (Note 1) CJ	24							pF
Typical Thermal resistance per leg (Note 2) R JA	36							/W
Typical Thermal resistance per leg (Note 2) R JL	13							/W
Operating Temperature Range T_J	-55 to +125							
Storage Temperature Range T_A	-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

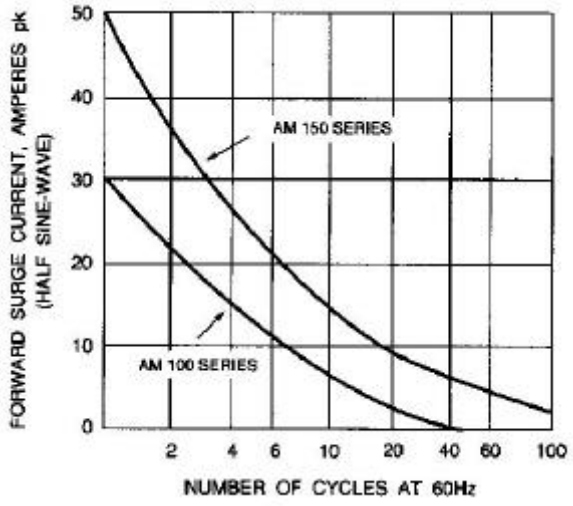


Fig. 1-MAXIMUM NON-REPETITIVE SURGE CURRENT

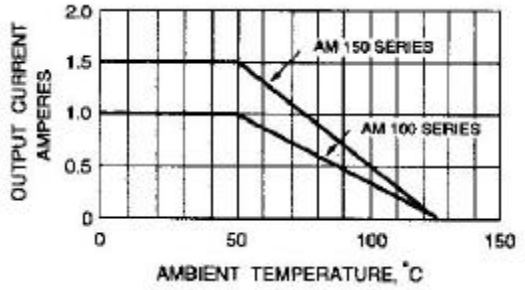


Fig. 2-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

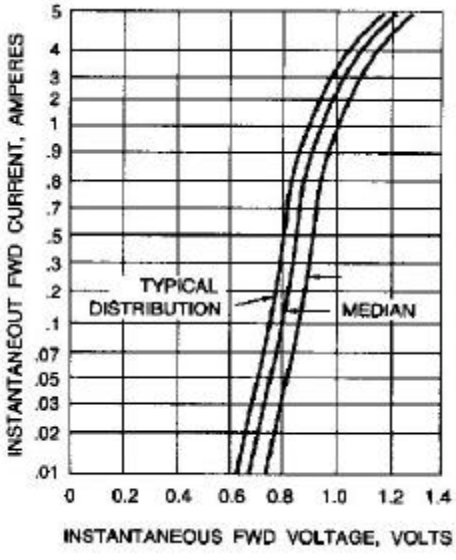


Fig. 3-TYPICAL FORWARD CHARACTERISTICS

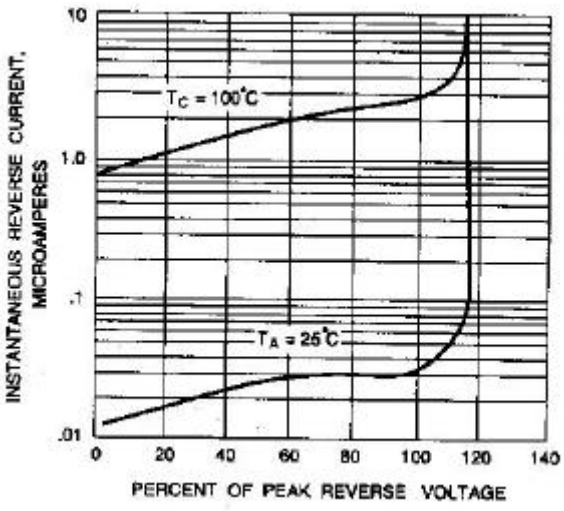


Fig. 4-TYPICAL REVERSE CHARACTERISTICS