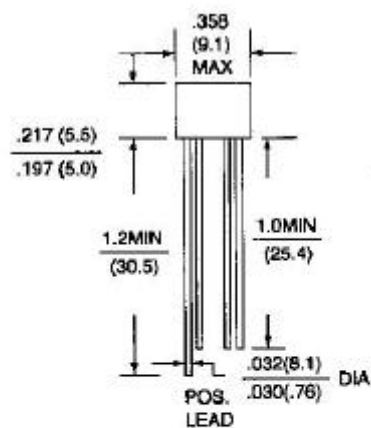


AM100/150 THRU AM1010/1510

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

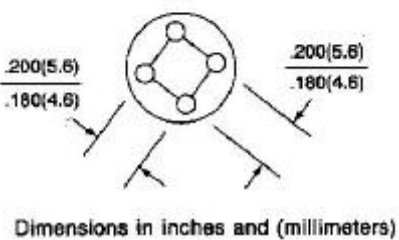
Case: Reliable low cost construction utilizing molded plastic technique results in inexpensive product

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")



Dimensions in inches and (millimeters)

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 |
| | 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 _A = 25 DC Blocking Voltage per element T _A =100 | 10.0 | | | | | | A | |
| | 1.0 | | | | | | mA | |
| I ² t Rating for fusing (t < 8.35ms) | 10 | | | | | | A ² S | |
| Typical Junction capacitance per leg (Note 1) C _J | 24 | | | | | | pF | |
| Typical Thermal resistance per leg (Note 2) R _{JA} | 36 | | | | | | /W | |
| Typical Thermal resistance per leg (Note 2) R _{JL} | 13 | | | | | | | |
| 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

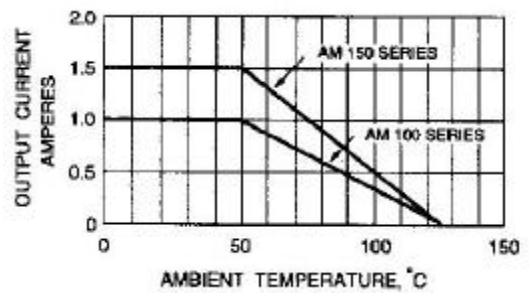
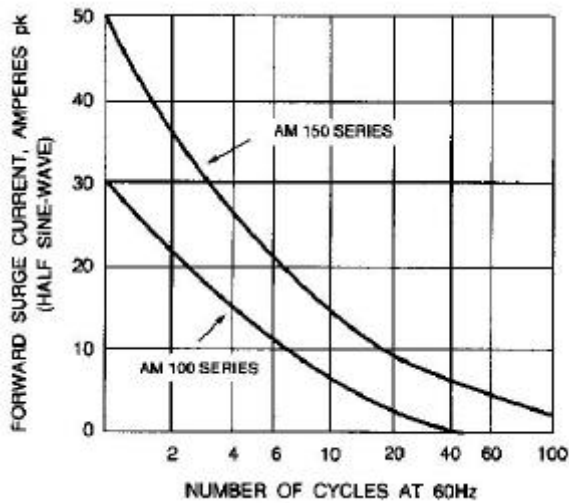


Fig. 1-MAXIMUM NON-REPETITIVE SURGE CURRENT Fig. 2-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

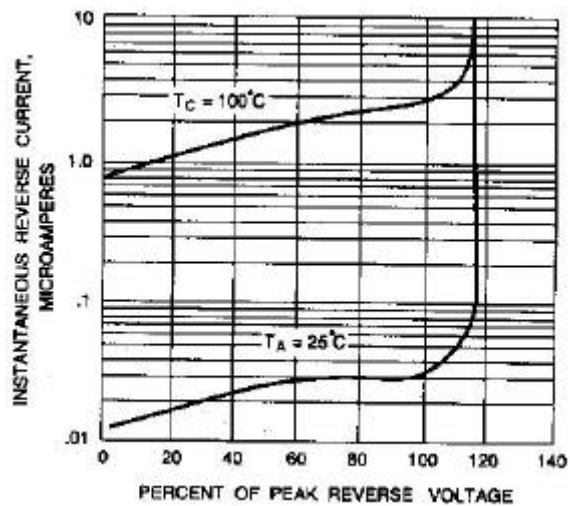
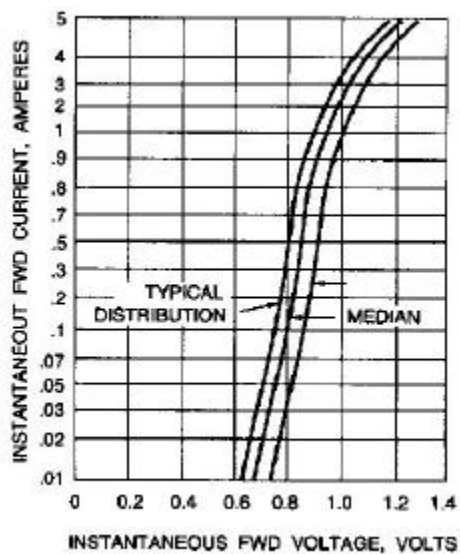


Fig. 3-TYPICAL FORWARD CHARACTERISTICS Fig. 4-TYPICAL REVERSE CHARACTERISTICS