

3.DATASHEET

AM150~AM1510

1.0 AMPERE SILICON MINIATURE SINGLE- PHASE BRIDGES
VOLTAGE - 50 to 1000 Volts CURRENT - 1.5 Amperes

Recongized File # E111753

FEATURES

- Ratings to 1000V PRV
- Surge overload rating: 50 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Mounting position:Any

MECHANICAL DATA

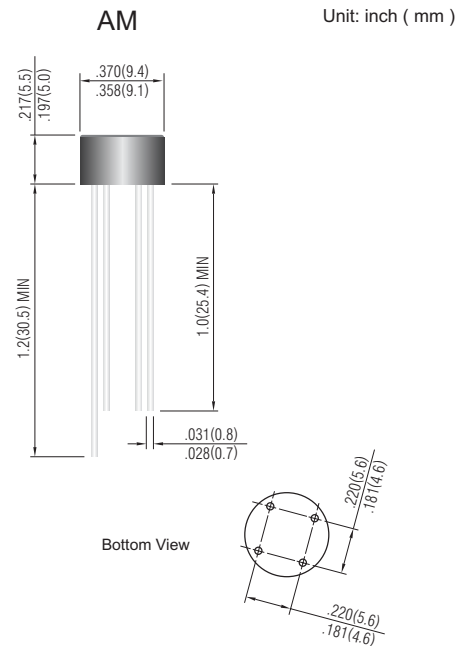
Case:Reliable low cost construction utilizing molded plastic technique results in inexpensive product.

Terminals: Leads 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

Rating at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.
For Capacitive load derate current by 20%.

| | AM150 | AM151 | AM152 | AM154 | AM156 | AM158 | 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 Current $T_A=50^\circ\text{C}$ | 1.5 | | | | | | | A |
| Peak Forward Surge Current, 8.3ms singlehalf sine-wave superimposed on rated load | 50.0 | | | | | | | A |
| I^2t Rating for fusing ($t < 8.35$ ms) | 10.0 | | | | | | | A ² t |
| Maximum Forward Voltage Drop per Bridge Element at 1.0A | 1.0 | | | | | | | V |
| Maximum Reverse Current at Rated $T_J=25^\circ\text{C}$ | 10.0 | | | | | | | μA |
| DC Blocking Voltage per element $T_J=125^\circ\text{C}$ | 1.0 | | | | | | | mA |
| Typical Junction capacitance per leg (Note 1) C_J | 24.0 | | | | | | | pF |
| Typical Thermal resistance per leg (Note 2) $R_{\theta JA}$ | 36.0 | | | | | | | $^\circ\text{C/W}$ |
| Typical Thermal resistance per leg (Note 2) $R_{\theta JA}$ | 13.0 | | | | | | | |
| Operating Temperature Range T_J | -55 to +125 | | | | | | | $^\circ\text{C}$ |
| Storage Temperature Range T_A | -55 to +150 | | | | | | | $^\circ\text{C}$ |

NOTES:

1. Measured at 1.0 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 X 0.47"(12 X 12mm) copper pads.

RATING AND CHARACTERISTIC CURVES

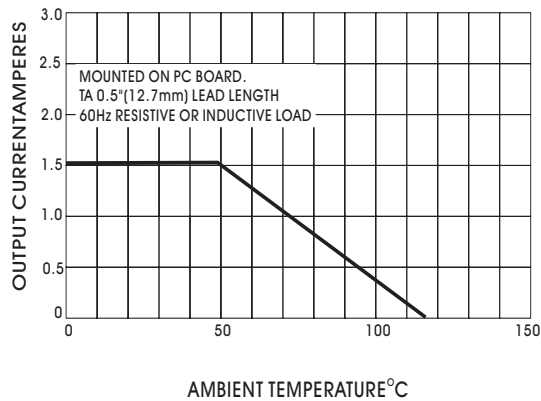


Fig. 1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

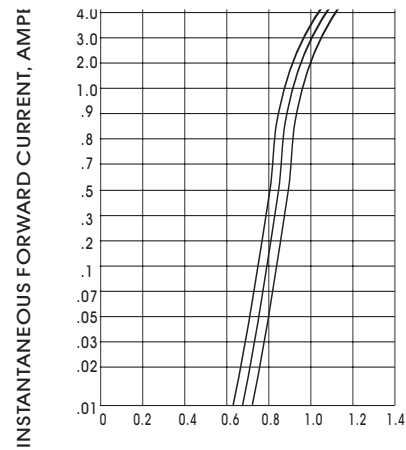


Fig. 2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS (25°C)

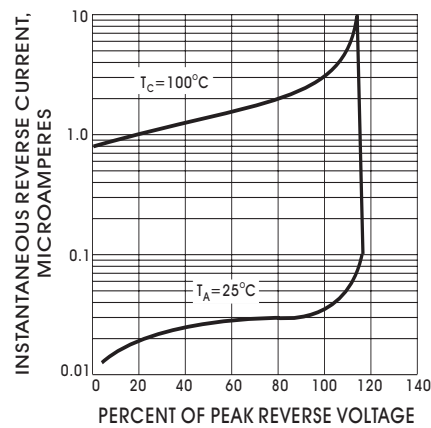


Fig. 3- TYPICAL REAK REVERSE CHARACTERISTICS

