



DATA SHEET

AM100~AM1010

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

Recognized File # E111753

FEATURES

- Ratings to 1000V PRV
- Surge overload rating: 30 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Mounting position: Any

MECHANICAL DATA

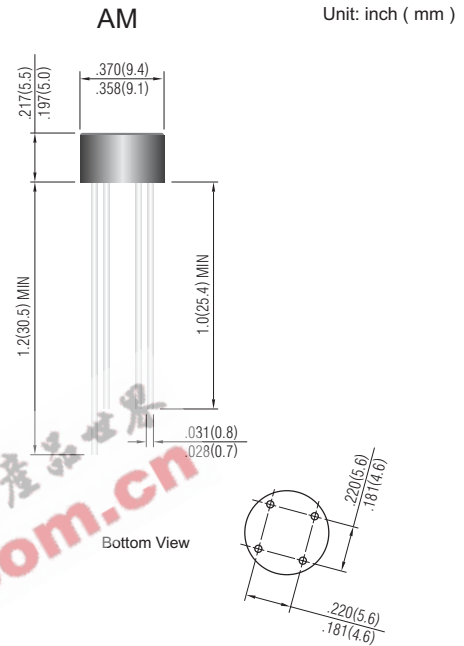
Case: Reliable low cost construction utilizing molded plastic technique results in inexpensive product.

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%.

	AM100	AM101	AM102	AM104	AM106	AM108	AM1010	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 $T_A=50^\circ\text{C}$	1.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	30.0							A
I^2t Rating for fusing ($t < 8.35$ ms)	10.0							A^2t
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							$^\circ\text{C}/\text{W}$
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

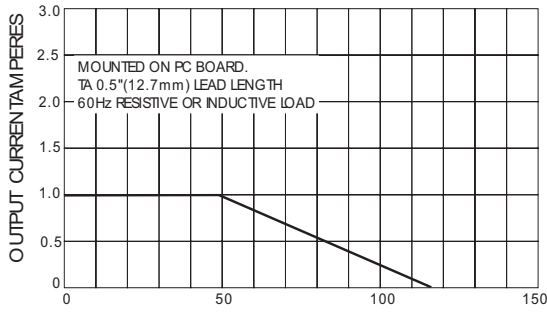


Fig. 1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

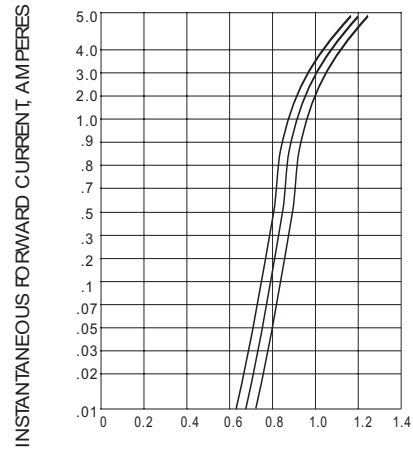


Fig. 2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS (25°C)

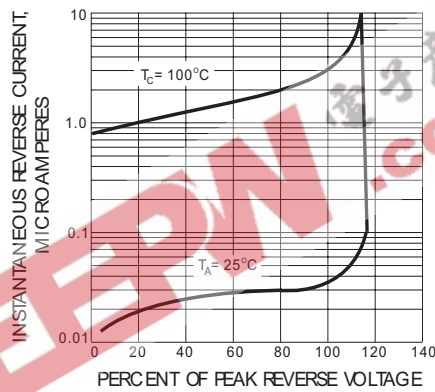


Fig. 3- TYPICAL REAK REVERSE CHARACTERISTICS

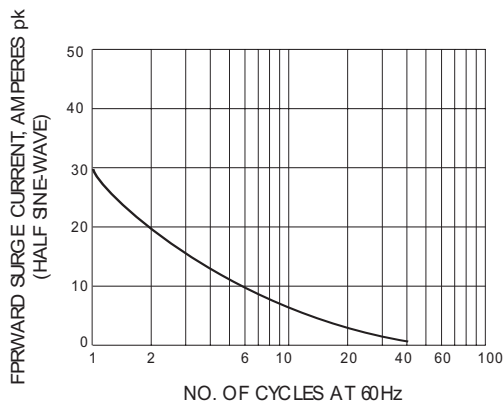


Fig. 4- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT