

Silicon Miniature Single-Phase Bridge

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AM 100/150 Thru AM1010/1510

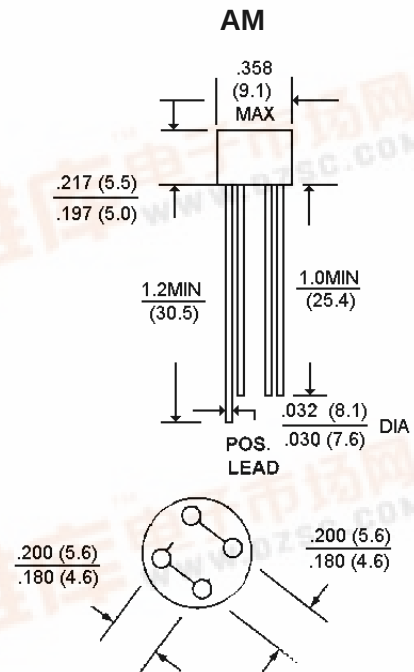
Voltage: 50 - 1000 Volts
Current: 1.0 - 1.5 Amp

Features

Ratings to 1000VPRV
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°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
AM100 Maximum Average Forward Rectified Current at T _A = 50°C	AM100	1.0							A
	AM150	1.5							
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	AM100	30							A
	AM150	50							
Maximum Forward Voltage Drop per Bridge Element at 1.0A DC		1.0							V
Maximum Reverse Current at Rated T _A = 25°C		10.0							uA
DC Blocking Voltage per element T _A = 100°C		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 _{θJA}		36							°C/W
Typical Thermal resistance per leg (Note 2) R _{θJL}		13							
Operating Temperature Range T _J		-55 to +125							°C
Storage Temperature Range T _A		-55 to +150							°C

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 0.47x0.47" (12 x 12mm) copper pads

Rating and Characteristic Curves (AM100/150 T HRU AM1010/1510)

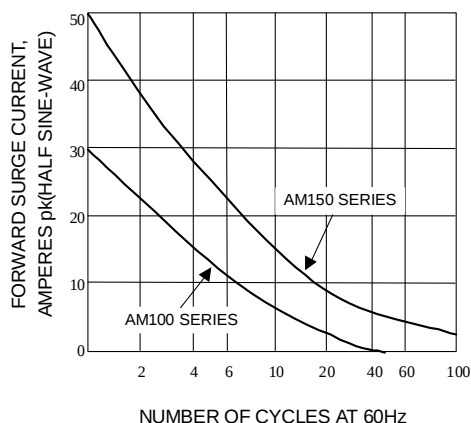


Fig. 1-MAXIMUM NON-REPETITIVE SURGE CURRENT

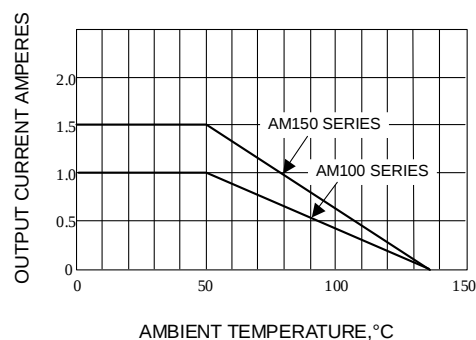


Fig. 2-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

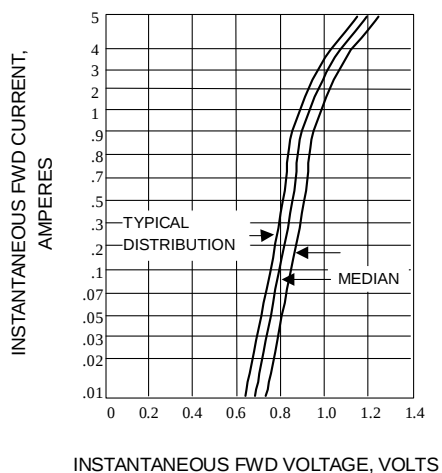


Fig. 3-TYPICAL FORWARD CHARACTERISTICS(25 °C)

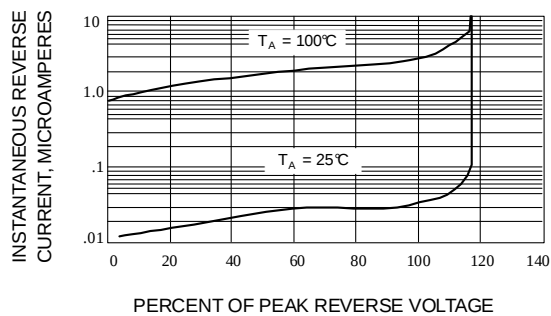


Fig. 4-TYPICAL REVERSE CHARACTERISTICS