Silicon Miniature Single-Phase Bridge



AM 100/150 Thru AM1010/1510

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

Features

Ratings to 1000VPRV
Surge overloadrating - 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

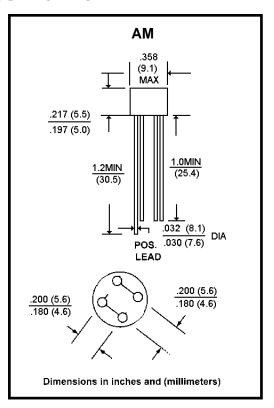
Terminals: Lead solderable per MIL-STD-202,

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°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, Resistive or inductive load.

		A B 4 4 0 0	A B 4 4 O 4	A B 4 4 0 0	A B 4 4 O 4	A B 4 4 0 0	A B 4 4 0 0	A B 4 4 O 4 O	
For capacitive load, derate current by 20%.		AM100	AM101	AM102	AM104	AM106	AM108	AM1010	UNITS
		AM150	AM151	AM152	AM154	AM156	AM158	AM1510	
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	AM100	1.0						Α	
Current at T _A = 50°C	AM150	1.5							
Peak Forward Surge Current, 8.3ms single half	AM100	30							Α
sine-wave superimposed on rated load	AM150	50							
Maximum Forward Voltage Drop per Bridge Element at 1.0A		1.0						V	
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							mΑ
I ² t Rating for fusing (t< 8.35ms)		10							A ² S
Typical Junction capacitance per leg (Note 1) CJ		24							pF
Typical Thermal resistance per leg (Note 2) R■JA			36						
Typical Thermal resistance per leg (Note 2) R ● JL		13							°C/W
Operating Temperature Range T _J		-55 to +125							°C
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 0.47x 0.47"(12 x 12mm) copper pads

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

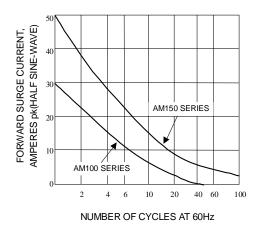


Fig. 1-MAXIMUM NON-REPETITIVE SURGE CURRENT

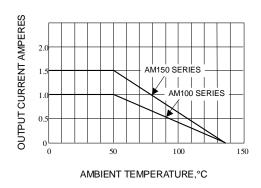


Fig. 2-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

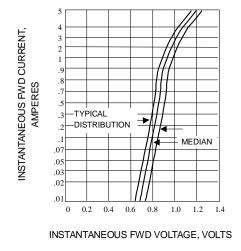


Fig. 3-TYPICAL FORWARD CHARACTERISTICS(25 °C)

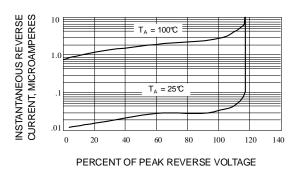


Fig. 4-TYPICAL REVERSE CHARACTERISTICS

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