



# DATA SHEET

## AM150~AM1510

### 1.5 AMPERE SILICON MINIATURE SINGLE-PHASE BRIDGES

**VOLTAGE** 50 to 600 Volts **CURRENT** 1.5 Amperes

AM

Unit: inch (mm)

**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

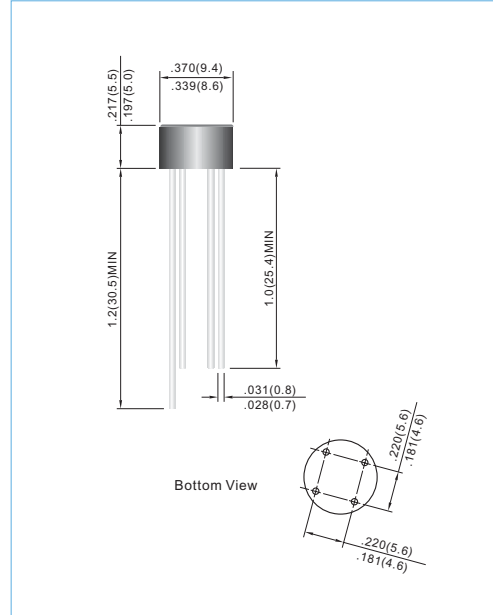
Case:Reliable low cost construction utilizing molded plastic technique results in inexpensive product.

Terminals: Leads solderable per MIL-STD-202,

Method 208

Polarity :Polarity symbols marking on body.

Weight: 0.05 ounce, 1.3 grams



#### 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%.

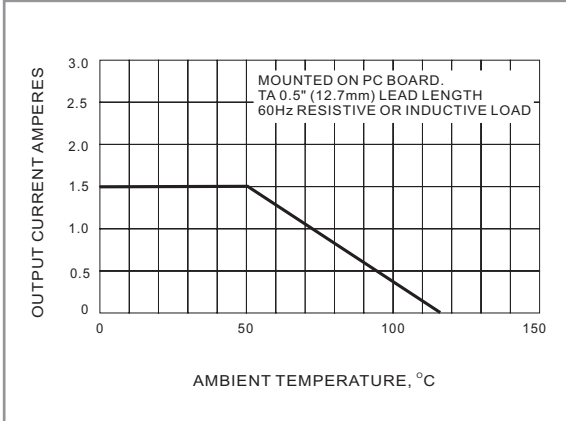
PARAMETER	SYMBOL	AM150	AM151	AM152	AM154	AM156	AM158	AM1510	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Current T <sub>A</sub> =50°C	I <sub>AV</sub>	1.5							A
Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	50							A
I <sup>2</sup> t Rating for fusing ( t<8.35ms)	I <sup>2</sup> t	10							A <sup>2</sup> t
Maximum Forward Voltage Drop per Bridge Element at 1.0A	V <sub>F</sub>	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	10 @ T <sub>A</sub> =25 °C 1000 @ T <sub>A</sub> =100 °C							µA
Typical Junction capacitance (Note 1)	C <sub>J</sub>	24							pF
Typical thermal resistance per leg ((Note 2)	R <sub>θJA</sub>	36							°C / W
Typical thermal resistance per leg ((Note 2)	R <sub>θJL</sub>	13							
Operating and Storage Temperature Range	T <sub>J</sub>	-55 to + 125							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150							°C

#### NOTES:

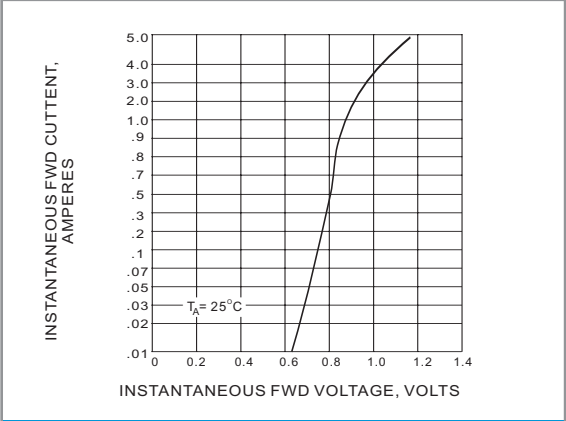
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.47 X 0.47"(12 X 12mm) copper pads.



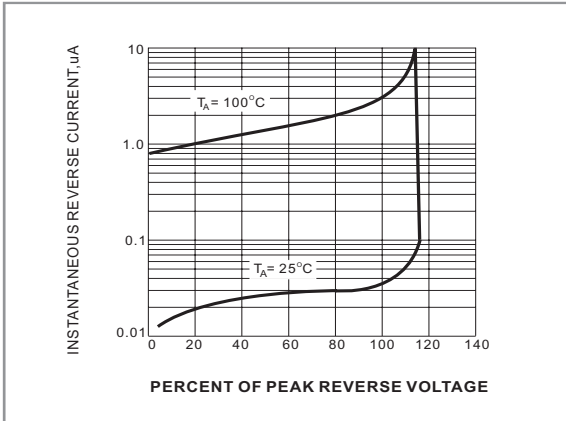
**RATING AND CHARACTERISTIC CURVES**



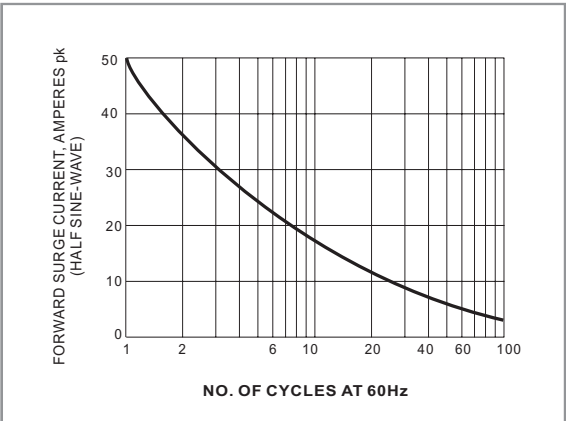
**FIG.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.2 TYPICAL FORWARD CHARACTERISTICS**



**FIG.3 TYPICAL REVERSE CHARACTERISTICS**



**FIG.4 MAX NON-REPETITIVE SURGE CURRENT**