



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

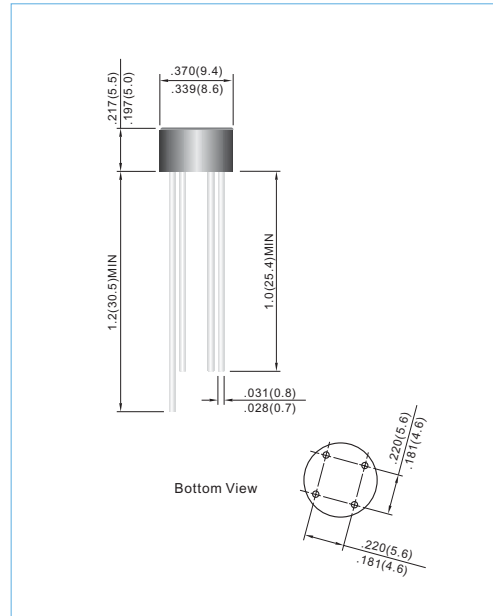
Case:Reliable low cost construction utilizing molded plastic technique results in inexpensive product.

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_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current $T_A=50^{\circ}C$	I_{AV}	1.5							A
Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50							A
I ² t Rating for fusing ($t < 8.35ms$)	I^2t	10							A ² t
Maximum Forward Voltage Drop per Bridge Element at 1.0A	V_F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	10 @ $T_A=25^{\circ}C$ 1000 @ $T_A=100^{\circ}C$							μA
Typical Junction capacitance (Note 1)	C_J	24							pF
Typical thermal resistance per leg ((Note 2)	$R_{\theta JA}$	36							$^{\circ}C / W$
Typical thermal resistance per leg ((Note 2)	$R_{\theta JL}$	13							
Operating and Storage Temperature Range	T_J	-55 to + 125							$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to + 150							$^{\circ}C$

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

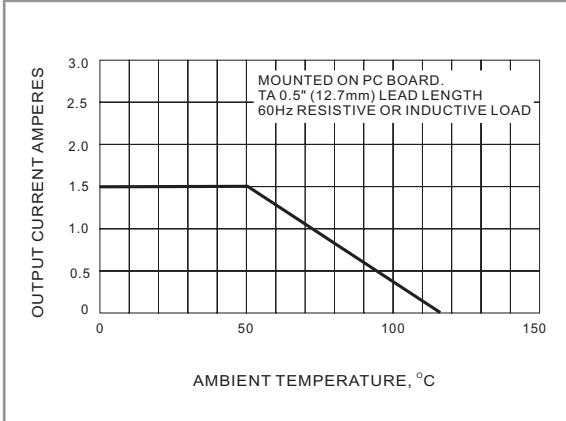


FIG.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

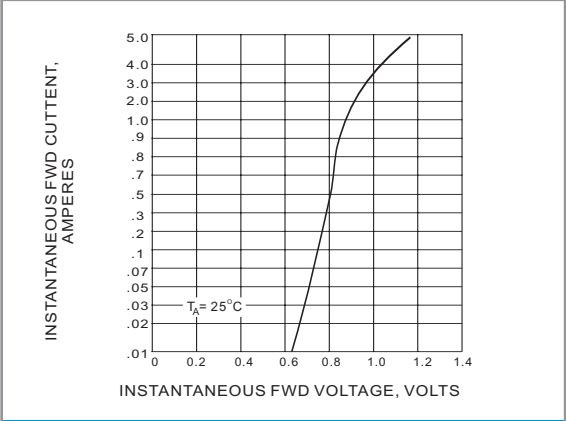


FIG.2 TYPICAL FORWARD CHARACTERISTICS

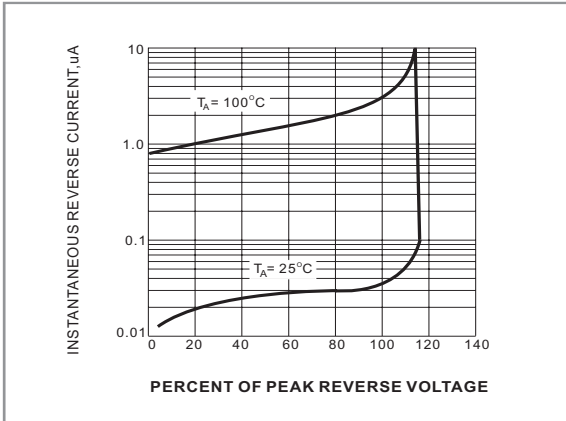


FIG.3 TYPICAL REVERSE CHARACTERISTICS

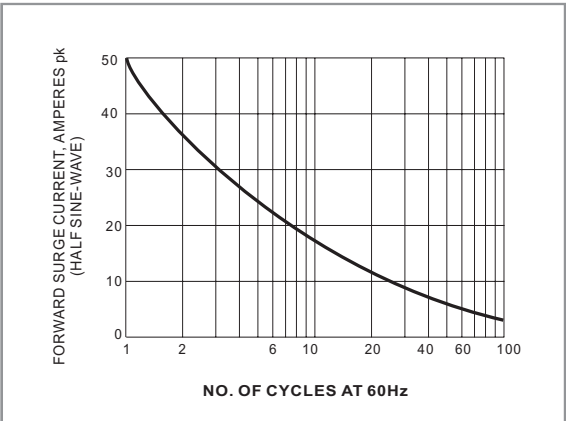


FIG.4 MAX NON-REPETITIVE SURGE CURRENT