



DATA SHEET

SEMICONDUCTOR

MB1S THRU MB10S

**MINI SURFACE MOUNT GLASS
PASSIVATED SINGLE-PHASE
BRIDGE RECTIFIER
VOLTAGE 100 to 1000Volts 0.8 Amperes CURRENT**

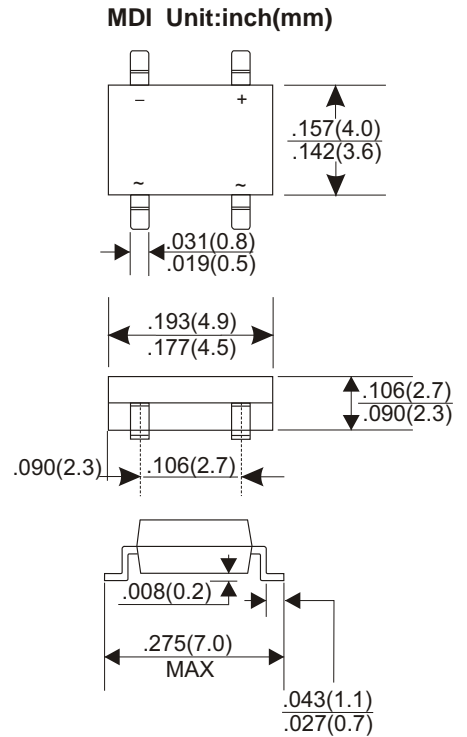


FEATURES

- Plastic material used carries Underwriters Laboratory recognition 94V-O
- Low leakage
- Surge overload rating-- 30 amperes peak
- Ideal for printed circuit board
- Exceeds environmental standards of MIL-S-19500
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

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 molded or marking on body.
- Mounting Position: Any.
- Weight: 0.008 ounce, 0.22 gram.



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%

	SYMBOLS	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	100	200	400	600	800	1000	V
Maximum Average Forward Current at TA = 40 TA=25 (Note 3)	IAV	0.8						A
Peak Forward Surge Current:8.3ms single half sine - wave superimposed on rated load (JEDEC method)	IFSM	35						A
I2t Rating for fusing (t<8.35ms)	I2t	3.735						A2s
Maximum Forward Voltage Drop per Bridge Element at 0.8A	VF	1.0						V
Maximum DC Reverse Current TJ = 25 at Rate DC Blocking Voltage TJ =125	IR	5.0 500						μ A
Typical Junction capacitance (Note 1)	CJ	25						pF
Typical thermal resistance (Note2)	R JA R JL	85 20						/W
Operating Temperature Range	TJ, TSTG	-55 to +150						

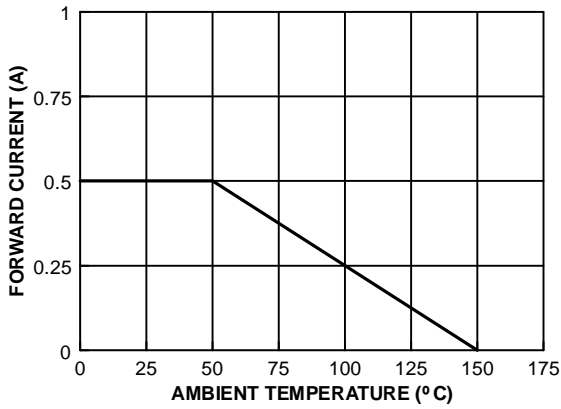
NOTES:

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 0.5 X 0.5"(13 X 13mm) copper pads
3. * R-load on alumina substrate Ta=25

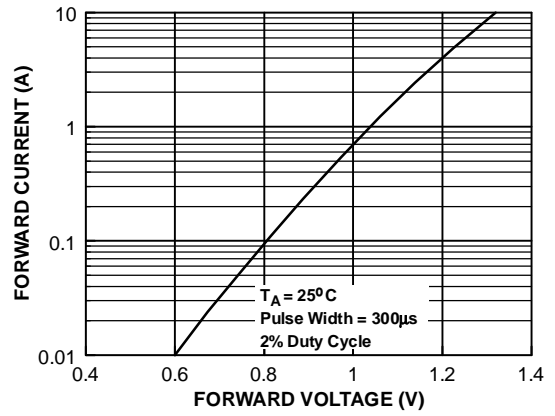
DEVICE CHARACTERISTICS

MB1S THRU MB10S

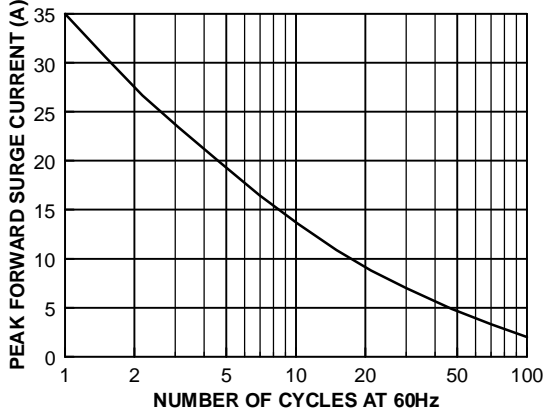
Forward Current Derating Curve



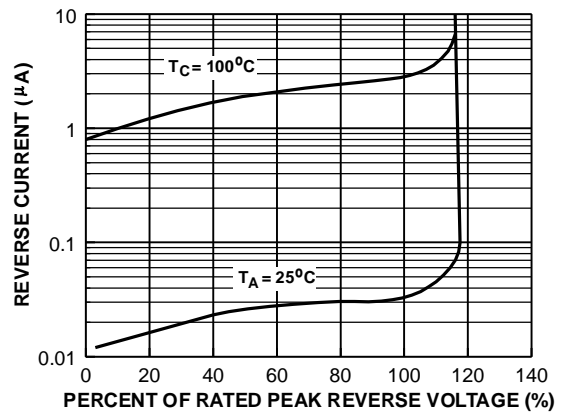
Forward Characteristics



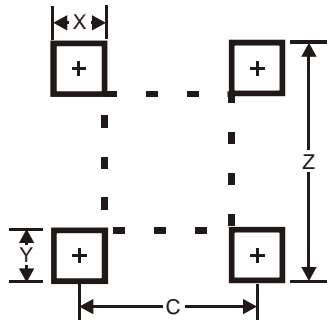
Non-Repetitive Surge Current



Reverse Characteristics



PAD LAYOUT



Dimensions	MDI(mm)
Z	7.5
X	1.2
Y	1.6
C	2.7