

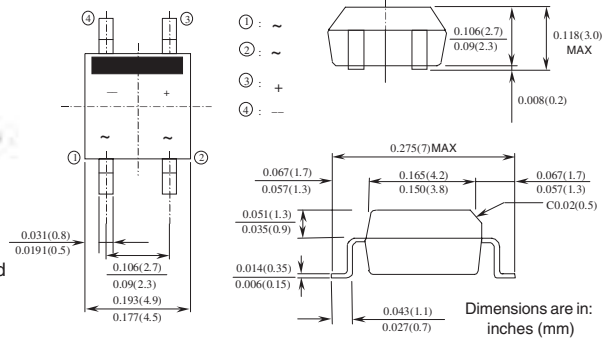
MB1S - MB8S

Features

- Low leakage
- Surge overload rating:
35 amperes peak.
- Ideal for printed circuit board.



SOIC-4
Polarity symbols molded
or marking on body



0.5 Ampere Glass Passivated Bridge Rectifiers

Absolute Maximum Ratings* $T_A = 25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Value | Units |
|-----------------------|---|-------------|---------------------------|
| I_O | Average Rectified Current @ $T_A = 50^\circ\text{C}$ | 0.5 | A |
| $i_{i(\text{surge})}$ | Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method) | 35 | A |
| P_D | Total Device Dissipation Derate above 25°C | 1.4 11 | W mW/ $^\circ\text{C}$ |
| R_{JA} | Thermal Resistance, Junction to Ambient, ** per leg | 85 | $^\circ\text{C}/\text{W}$ |
| R_{JL} | Thermal Resistance, Junction to Lead, ** per leg | 20 | $^\circ\text{C}/\text{W}$ |
| T_{stg} | Storage Temperature Range | -55 to +150 | $^\circ\text{C}$ |
| T_J | Operating Junction Temperature | -55 to +150 | $^\circ\text{C}$ |

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

** Device mounted on PCB with 0.5-0.5" (13x13 mm) lead length.

Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

| Parameter | Device | | | | | Units |
|---|--------|-----|-----|-----|-----|----------------------|
| | 1S | 2S | 4S | 6S | 8S | |
| Peak Repetitive Reverse Voltage | 100 | 200 | 400 | 600 | 800 | V |
| Maximum RMS Bridge Input Voltage | 70 | 140 | 280 | 420 | 560 | V |
| DC Reverse Voltage (Rated V_R) | 100 | 200 | 400 | 600 | 800 | V |
| Maximum Reverse Leakage, per leg @ rated V_R | | | | | | A |
| $T_A = 25^\circ\text{C}$ | 5.0 | | | | | |
| $T_A = 125^\circ\text{C}$ | 0.5 | | | | | mA |
| Maximum Forward Voltage Drop, per bridge @ 0.5 A | 1.0 | | | | | V |
| I^2t rating for fusing $t < 8.3$ ms | 5.0 | | | | | A^2t |
| Typical Junction Capacitance, per leg $V_R = 4.0$ V, $f = 1.0$ MHz | 13 | | | | | pF |



Typical Characteristics

