

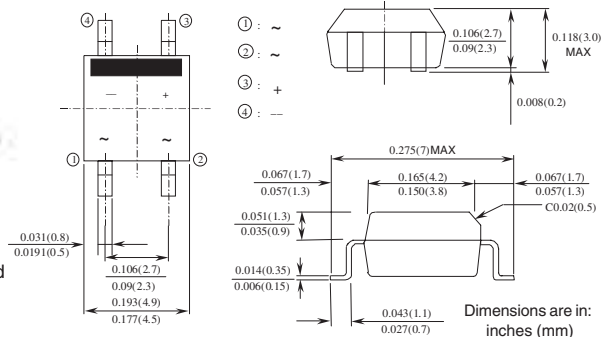
MB1S - MB8S

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

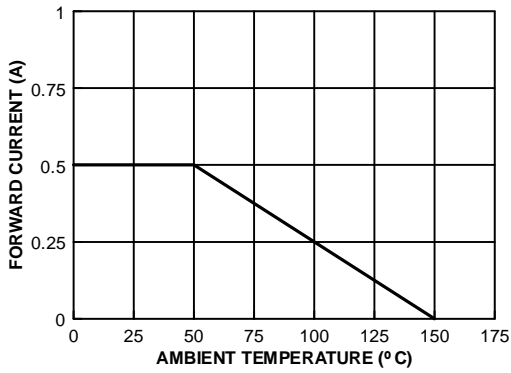
Glass Passivated Bridge Rectifiers

(continued)

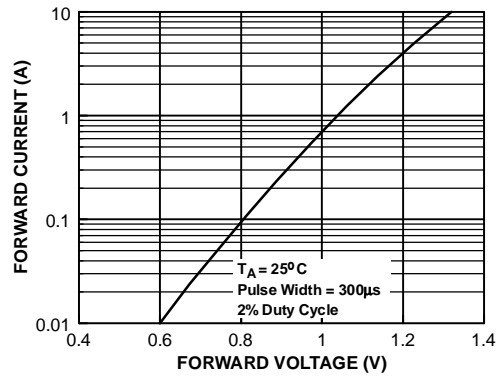
MB1S - MB8S

Typical Characteristics

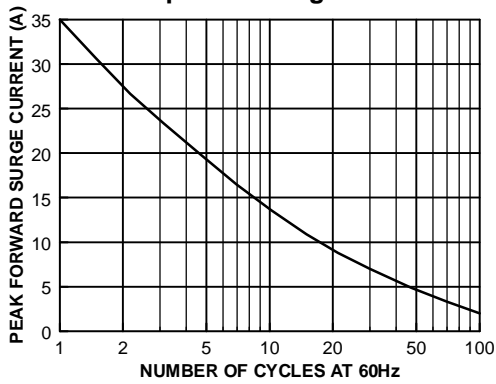
Forward Current Derating Curve



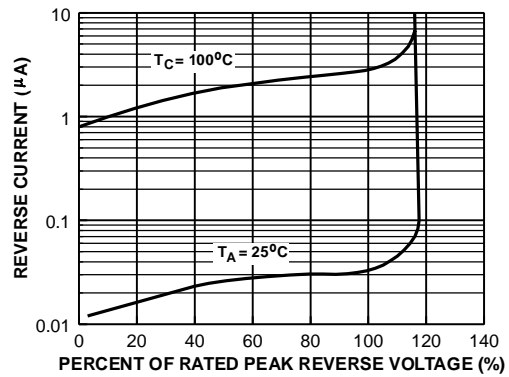
Forward Characteristics



Non-Repetitive Surge Current



Reverse Characteristics



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