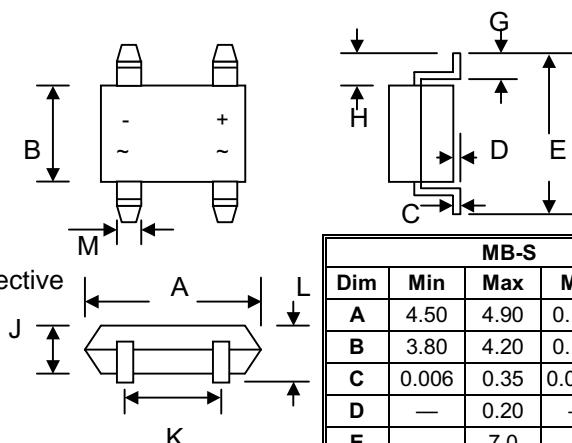


Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Designed for Surface Mount Application
- Plastic Material – UL Recognition Flammability Classification 94V-O
- UL Recognized File # E223064
- Green Products in Compliance with the RoHS Directive

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Weight: 0.22 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



MB-S				
Dim	Min	Max	Min	Max
A	4.50	4.90	0.177	0.193
B	3.80	4.20	0.150	0.165
C	0.006	0.35	0.0002	0.014
D	—	0.20	—	0.008
E	—	7.0	—	0.276
G	0.70	1.10	0.028	0.043
H	1.30	1.70	0.051	0.067
J	2.30	2.70	0.091	0.106
K	2.30	2.70	0.091	0.106
L	—	3.00	—	0.118
M	0.50	0.80	0.020	0.031
		In mm	In inch	

Maximum Ratings and Electrical Characteristics $\text{@T}_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

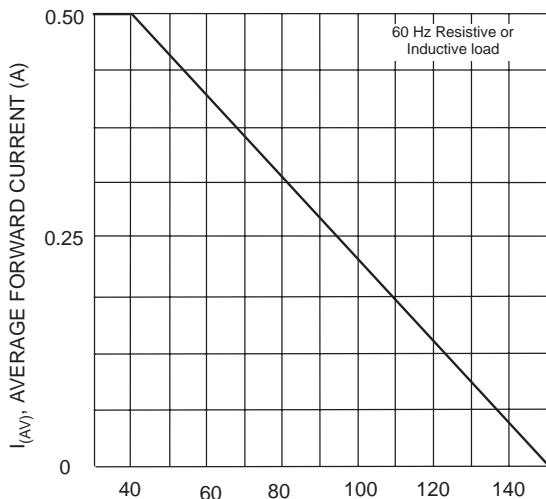
Characteristic	Symbol	MB1S-G	MB2S-G	MB4S-G	MB6S-G	MB8S-G	Unit
Peak Repetitive Reverse Voltage	V_{RRM}						
Working Peak Reverse Voltage	V_{RWM}	100	200	400	600	800	V
DC Blocking Voltage	V_R						
RMS Reverse Voltage	$V_{R(\text{RMS})}$	70	140	280	420	560	V
Average Rectified Output Current $\text{@T}_A = 40^\circ\text{C}$	I_o			0.5			A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}			30			A
I^2t Rating for Fusing ($t < 8.35\text{ms}$)	I^2t			10			A^2s
Forward Voltage per element $\text{@I}_F = 0.5\text{A}$	V_{FM}			1.0			V
Peak Reverse Current $\text{@T}_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage $\text{@T}_A = 125^\circ\text{C}$	I_{RM}			5.0			μA
500							
Typical Junction Capacitance (per leg) (Note 1)	C_j			25			pF
Typical Thermal Resistance (per leg) (Note 2)	$R_{\theta JA}$			85			K/W
Operating and Storage Temperature Range	T_j, T_{STG}			-55 to +150			$^\circ\text{C}$

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

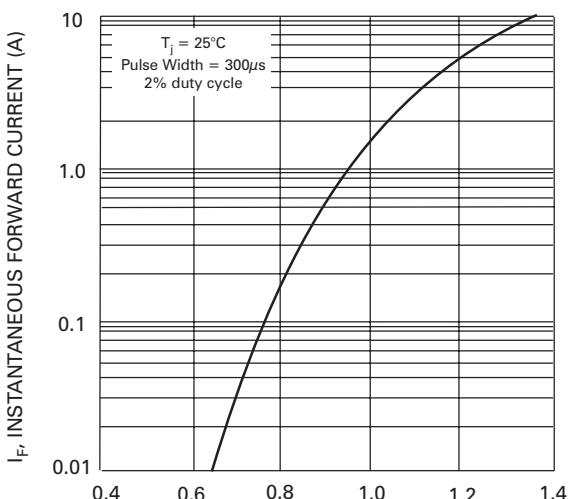
2. Thermal resistance junction to ambient mounted on PC board with 13mm² copper pads.

Data Sheet 1384, Rev. A

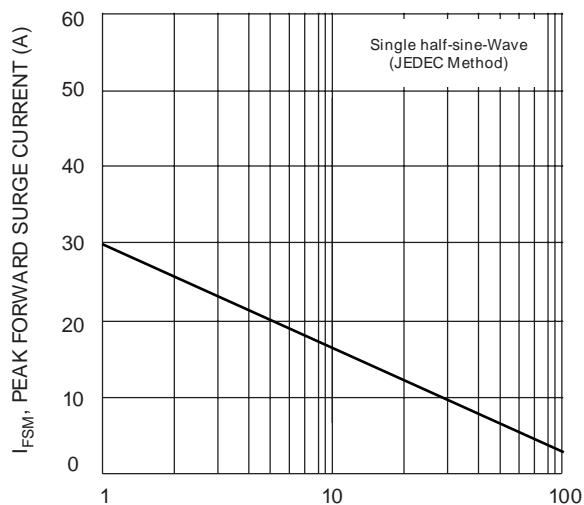
Green Products



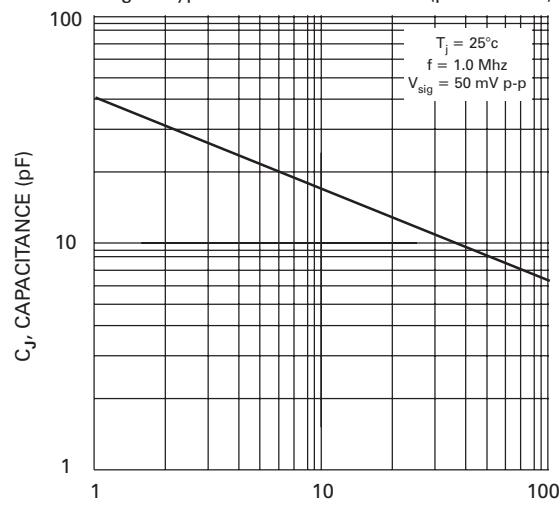
T_A , AMBIENT TEMPERATURE (°C)
Fig. 1 Output Current Derating Curve



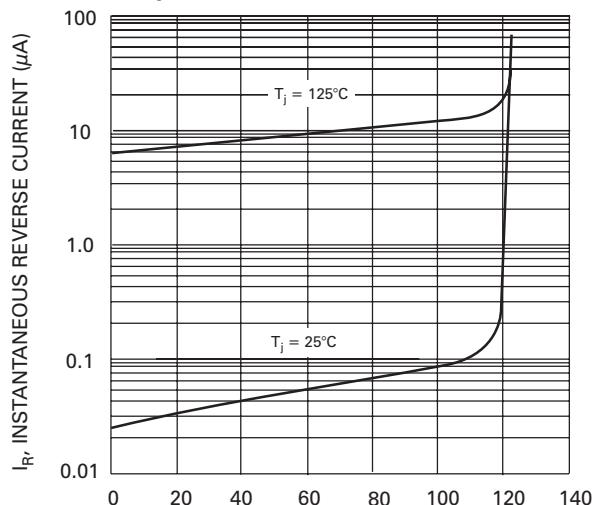
V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typ Forward Characteristics (per element)



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Max Non-Repetitive Peak Forward Surge Current



V_R , REVERSE VOLTAGE (V)
Fig. 4 Typ Junction Capacitance (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 5 Typ Reverse Characteristics (per element)

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