

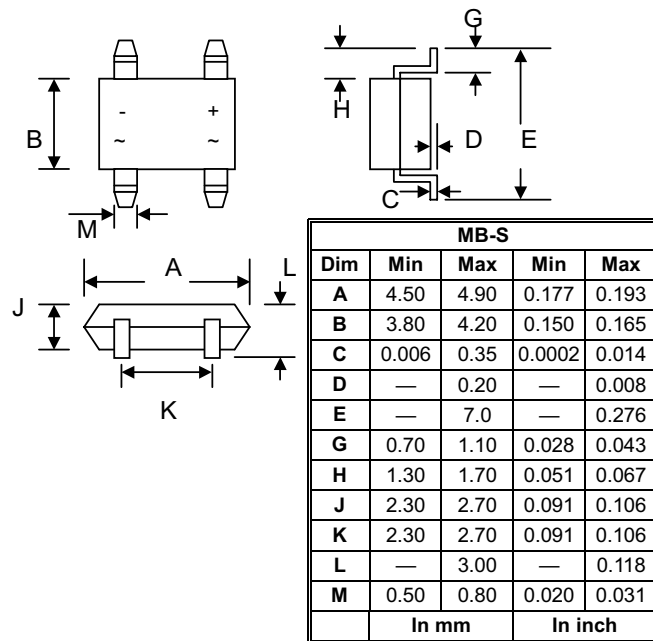
Data Sheet 1327, Rev. B

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-0
- UL Recognized File # E223064

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



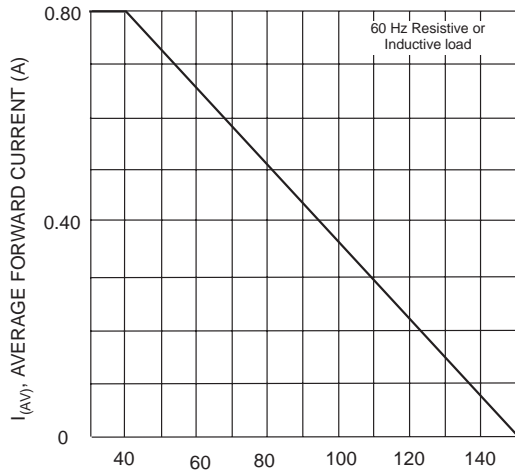
Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

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

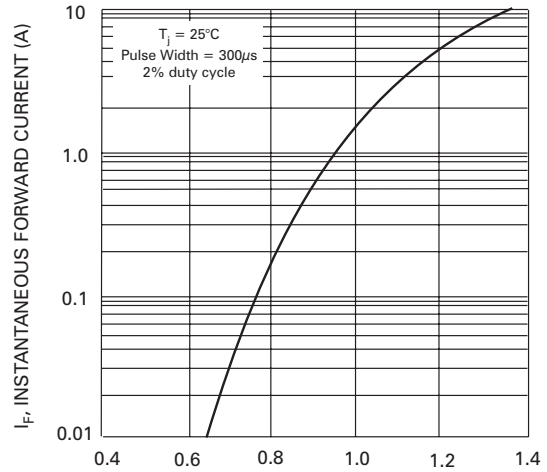
Characteristic	Symbol	MB1S	MB2S	MB4S	MB6S	MB8S	Unit	
Peak Repetitive Reverse Voltage	V_{RRM}							
Working Peak Reverse Voltage	V_{RWM}	100	200	400	600	800	V	
DC Blocking Voltage	V_R							
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	280	420	560	V	
Average Rectified Output Current @ $T_A = 40^{\circ}\text{C}$	I_o	0.8						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 @ $I_F = 0.5\text{A}$	V_{FM}	1.0						V
Peak Reverse Current @ $T_A = 25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^{\circ}\text{C}$	I_{RM}	5.0 500						μA
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.

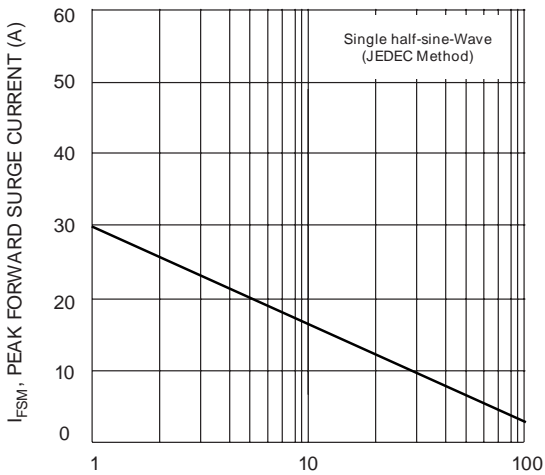
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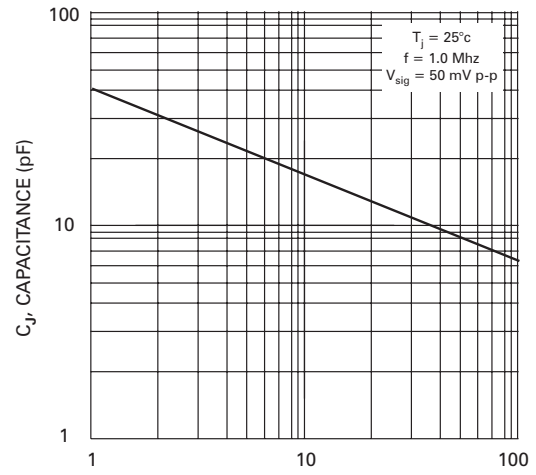
T_A, AMBIENT TEMPERATURE (°C)
Fig. 1 Output Current Derating Curve



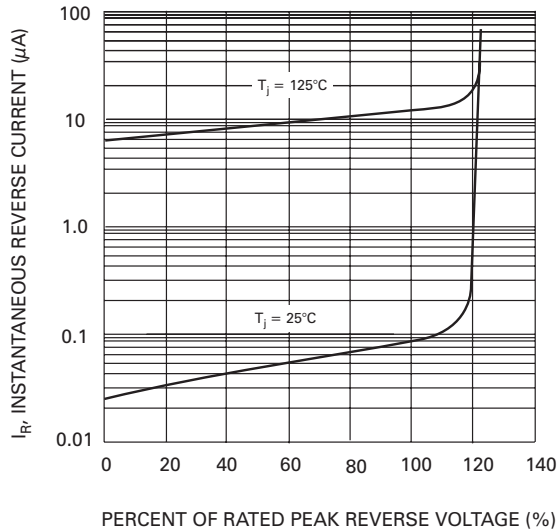
V_F, INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typ Forward Characteristics (per element)



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)