

MB2M thru MB10M

Miniature Glass Passivated Single-Phase Bridge Rectifiers
 Reverse Voltage 200V-1000V Forward Current 0.5A

Features

- Plastic package has underwriters laboratory flammability classification 94V-0
- Glass passivated chip junction
- Low forward voltage drop
- High current capability
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EC



MBM

Mechanical Data

- Case: MBM molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Mounting position: Any
- Weight: 0.22 grams (approx.)
- Polarity: As marked on the body



Schematic Diagram

Maximum Ratings and Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.)

Parameter	Symbols	MB2M	MB4M	MB6M	MB8M	MB10M	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	0.5 ¹ 0.8 ²					A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	35					A
Forward Voltage per Element @ $I_F=0.5A$	V_F	1.0					V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ C$	5.0					uA
	$T_A=125^\circ C$	100					
Typical Thermal Resisitance per Leg ²	$R_{\theta JA}$	70					°C/W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150					°C

Notes:

1. Mounted on glass epoxy PCB board with 1.3mm*1.3mm solder pad.
2. Mounted on aluminum substrate PCB board with 1.3mm*1.3mm solder pad.

Ratings and Characteristics Curves

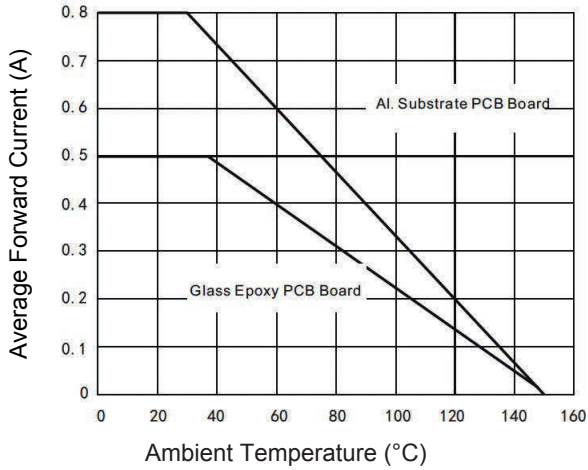


Figure 1. Typical Forward Current Derating Curve

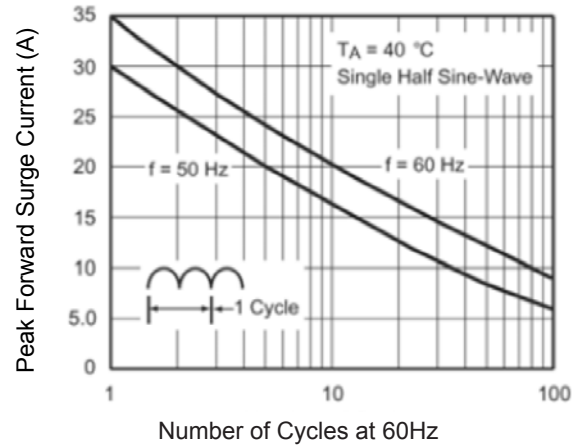


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

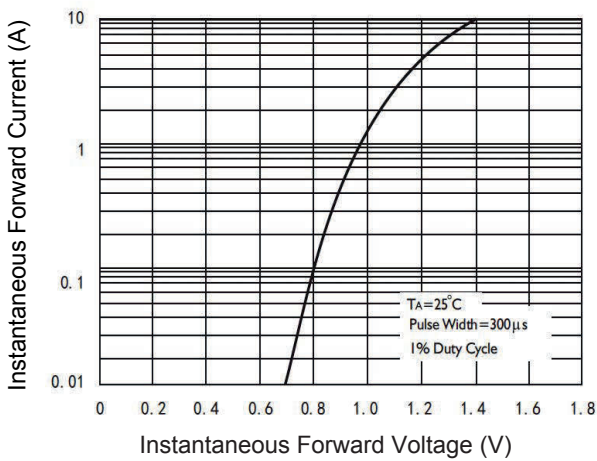


Figure 3. Typical Forward Characteristics

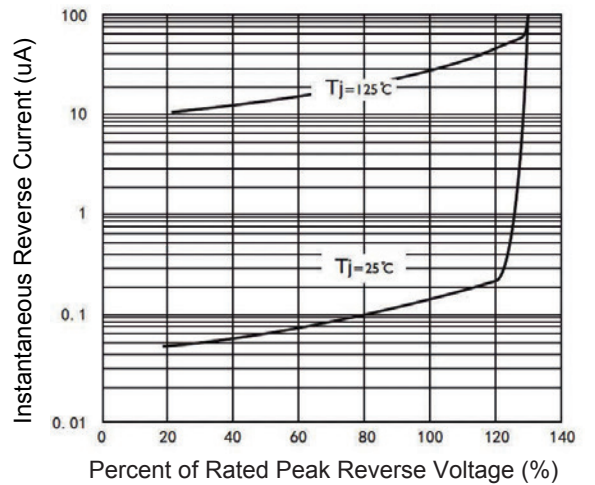


Figure 4. Typical Reverse Characteristics

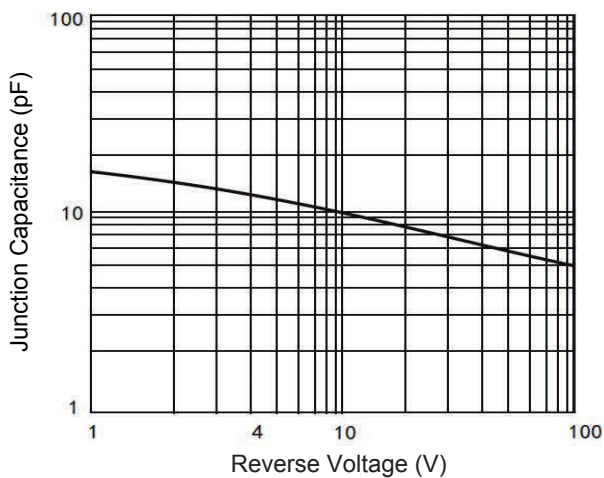
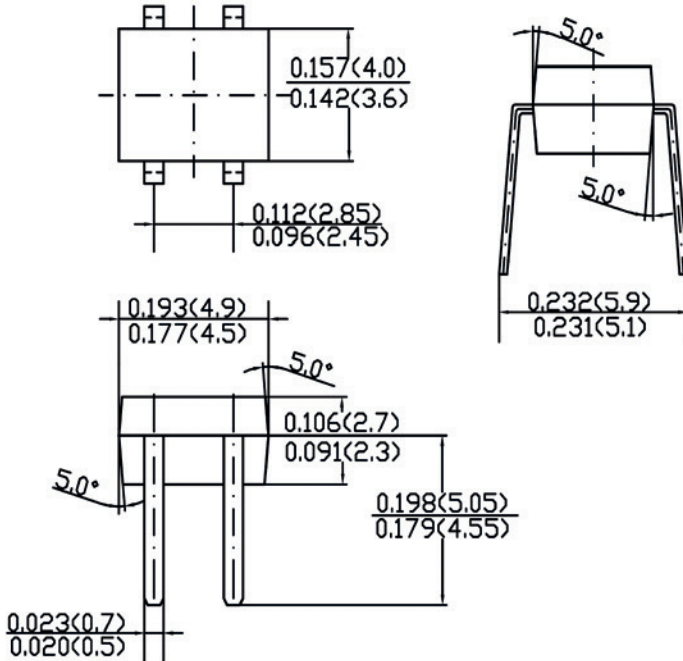


Figure 5. Typical Junction Capacitance

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Package Outline Dimensions (MBM)



Dimensions in inches and (millimeters)

Order Information

Device	Package	Marking	Carrier	Quantity
MB2M	MBM	MB2M	Tube	100pcs / Tube
MB4M	MBM	MB4M	Tube	100pcs / Tube
MB6M	MBM	MB6M	Tube	100pcs / Tube
MB8M	MBM	MB8M	Tube	100pcs / Tube
MB10M	MBM	MB10M	Tube	100pcs / Tube

For more information, please contact us at: inquiry@goodarksemi.com