GOOD-ARK
SEMICONDUCTOR

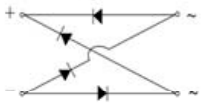
MB2MT thru MB10MT

Glass Passivated Bridge Rectifiers
Reverse Voltage 200 to 1000V Forward Current 0.5A

Features

- Glass passivated bridge rectifiers
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage drop
- Low leakage current

Package: MBM



Schematic Diagram

Mechanical Data

- Case:Molded plastic body over passivated junctions
- Terminals: plated leads solderable per MIL-STD-750, Method 2026
- Mounting position: any
- Weight: 0.078oz., 0.22g

Maximum Ratings and Electrical Characteristics

(T_A=25°C unless otherwise noted)

Parameter	Symbol	MB2MT	MB4ST	MB6MT	MB8MT	MB10MT	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 Output Current (see Fig.1) on glass-epoxy P.C.B on aluminum substrate	$I_{F(AV)}$	0.5(1) 0.8(2)					A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load, JEDEC method)	I_{FSM}	30					A
Rating for Fusig (t<8.3ms)	I^2t	3					A^2sec
Maximum Instantaneous Forward Voltage Drop per Leg at 0.4A	V_F	1.00					V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Leg T_A=25°C T_A=125°C	I_R	5 100					μA
Typical Thermal Resistance per Leg	$R_{\theta JA}$ $R_{\theta JA}$ $R_{\theta JL}$	85(1) 70(2) 20(1)					°C/W
Typical Junction Capacitance at 4.0V,1.0MHz	C_J	13					pF
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150					°C

Notes: 1. On glass epoxy P.C.B. mounted on 0.05×0.05"(1.3×1.3mm) pads

2. On aluminum substrate P.C.B.with an area of 0.8×0.8"(20×20mm) mounted on 0.05×0.05"(1.3×1.3mm) solder pad

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Ratings and Characteristics Curves (T_A = 25°C unless otherwise noted)

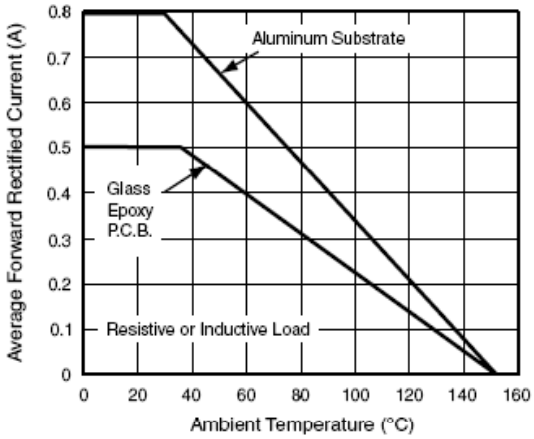

Figure 1. Derating Curve for Output Rectified Current

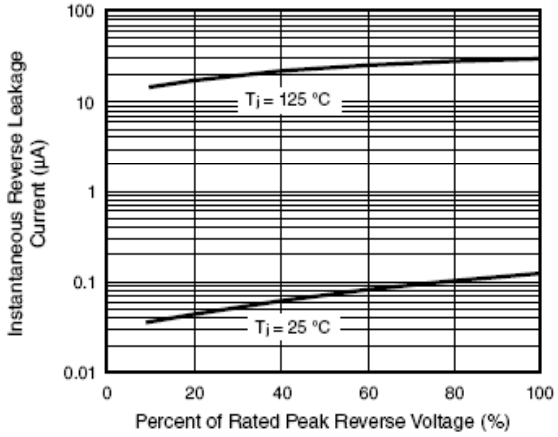

Figure 4. Typical Reverse Leakage Characteristics Per Leg

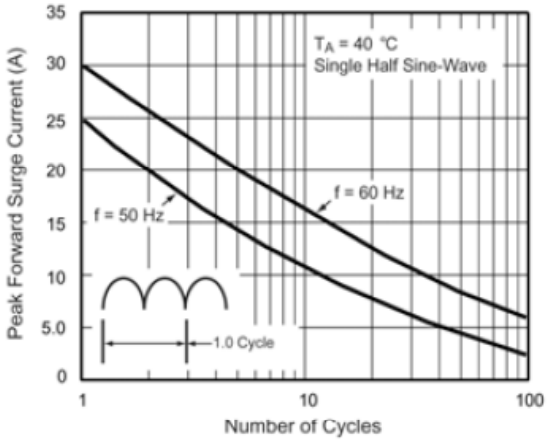

Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

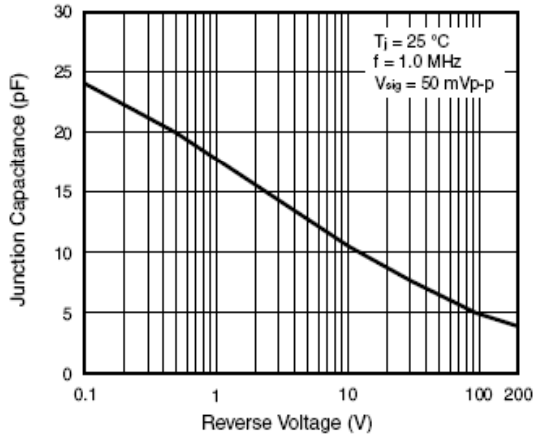

Figure 5. Typical Junction Capacitance Per Leg

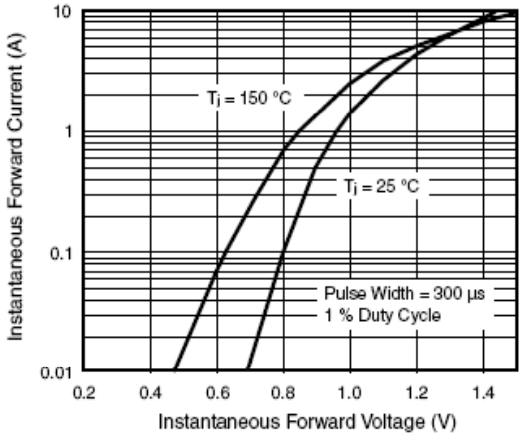

Figure 3. Typical Forward Voltage Characteristics Per Diode

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Package Outline Dimensions

in inches (millimeters)

MBM