GM GarboMicro Semiconductor

MB05M
THRU
MB10M

0.5Amp Single Phase Glass Passivated Bridge Rectifier 50 to 1000 Volts

Features

- Through Hole Package
- Glass Passivated Diode Construction
- Moisture Resistant Epoxy Case
- High Surge Current Capability

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

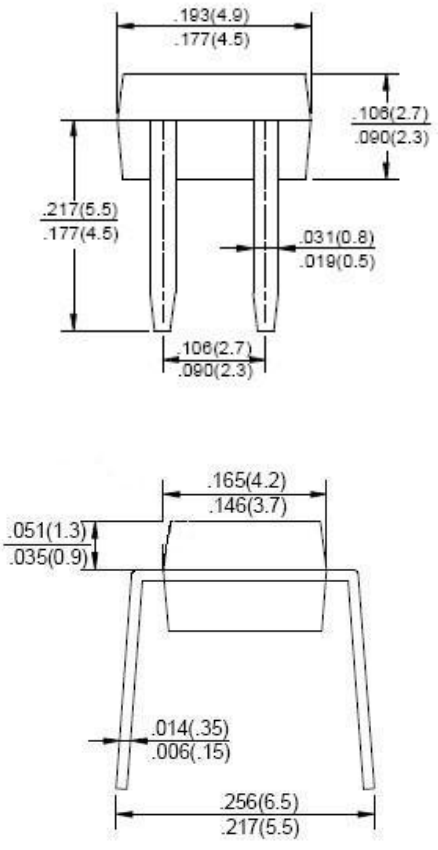
GM Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MB05M	---	50V	35V	50V
MB1M	---	100V	70V	100V
MB2M	---	200V	140V	200V
MB4M	---	400V	280V	400V
MB6M	---	600V	420V	600V
MB8M	---	800V	560V	800V
MB10M	---	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	0.5A	T_A = 40°C
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.0V	I_{FM} = 0.5A; T_A = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μA 0.5mA	T_A = 25°C T_A = 125°C
Typical Junction Capacitance	C_J	25pF	Measured at 1.0MHz, V_R=4.0V

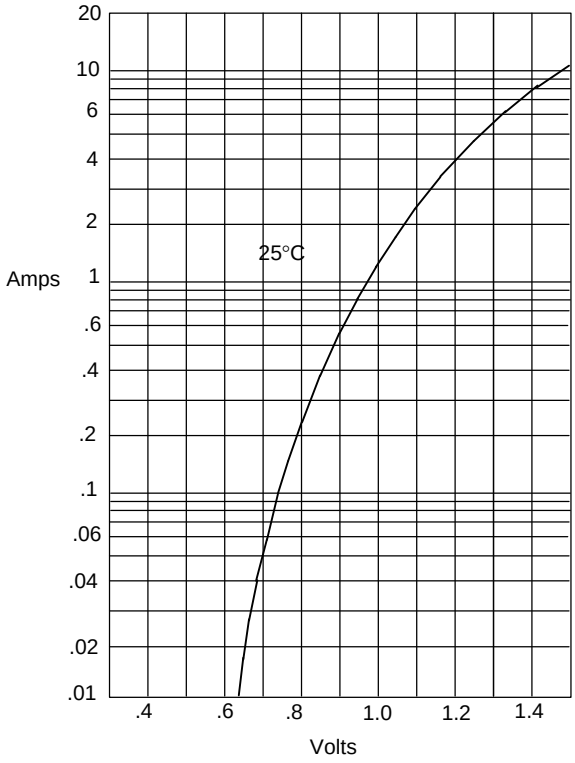
*Pulse Test: Pulse Width 300μsec, Duty Cycle 1%

MBM



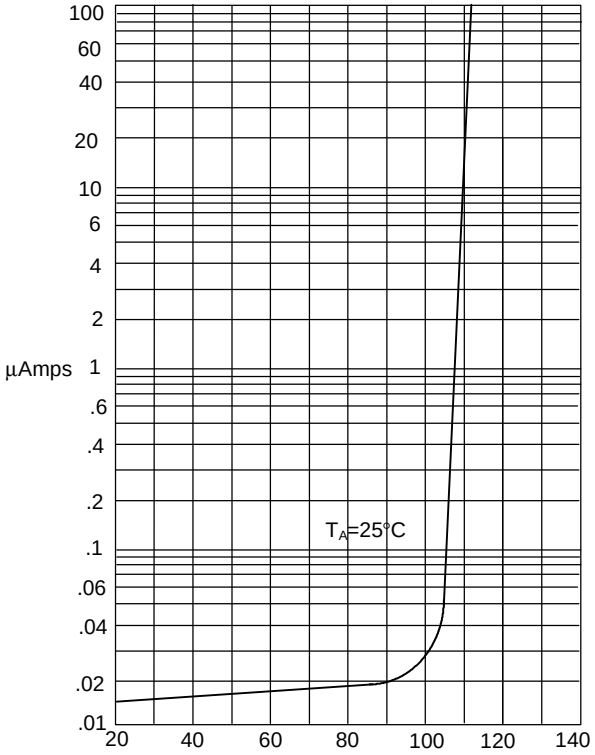
MB05M thru MB10M

Figure 1
Typical Forward Characteristics



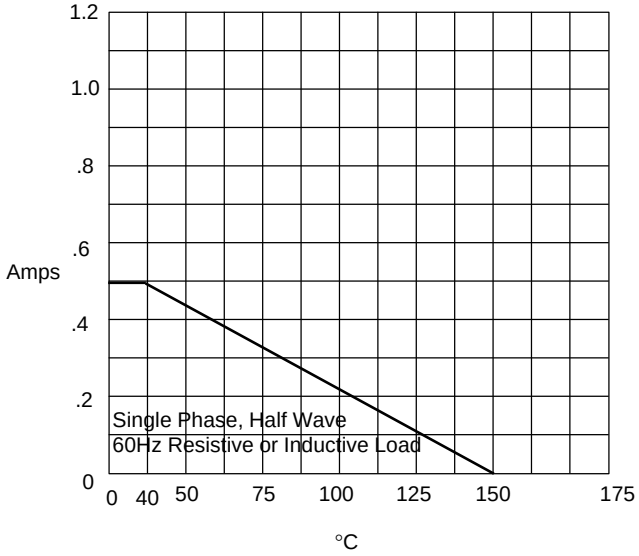
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



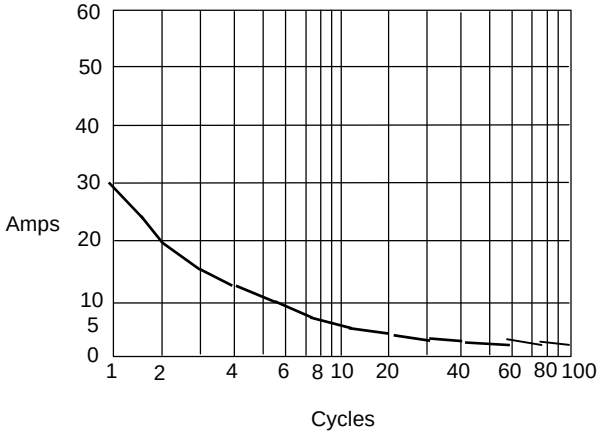
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*
Ambient Temperature -°C

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles