



# MB05M THRU MB10M

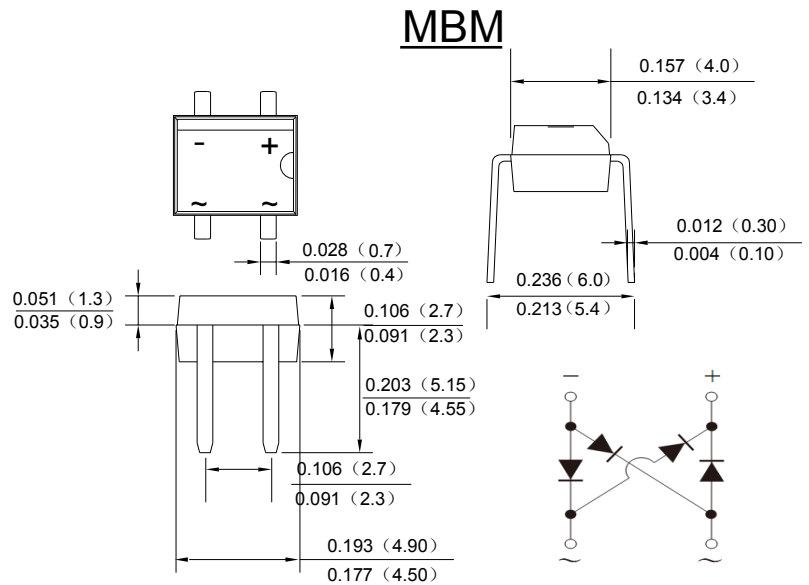
## SINGLE PHASE 0.8AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

### Features

- Glass Passivated Die Construction
- Low leakage
- Ideal for printed circuit board
- Surge overload rating-30A peak
- Designed for Surface Mount Application
- Plastic Material-UL Flammability 94V-0

### Mechanical Data

- Case:Reliable low cost construction utilizing molded plastic technique
- Terminals:Plated Leads Solderable per MIL-STD-202,Method208
- Polarity:As Marked on Case
- Mounting Position:Any
- Marking:Type Number



dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

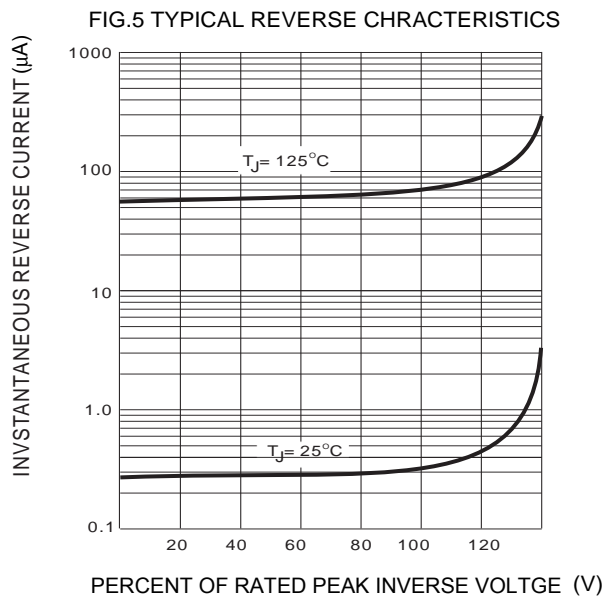
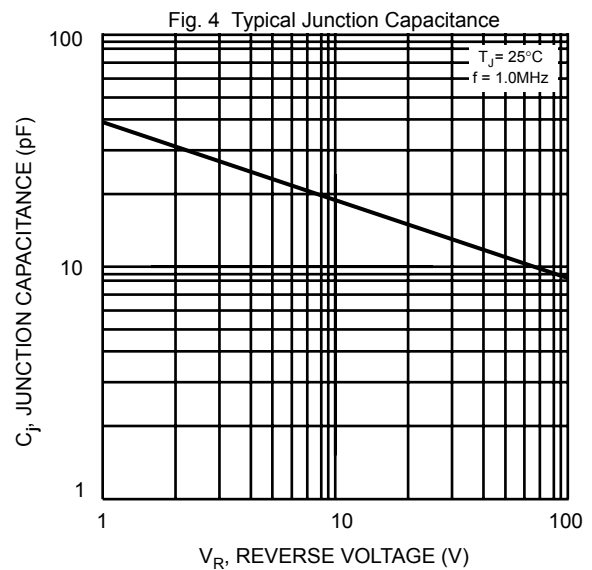
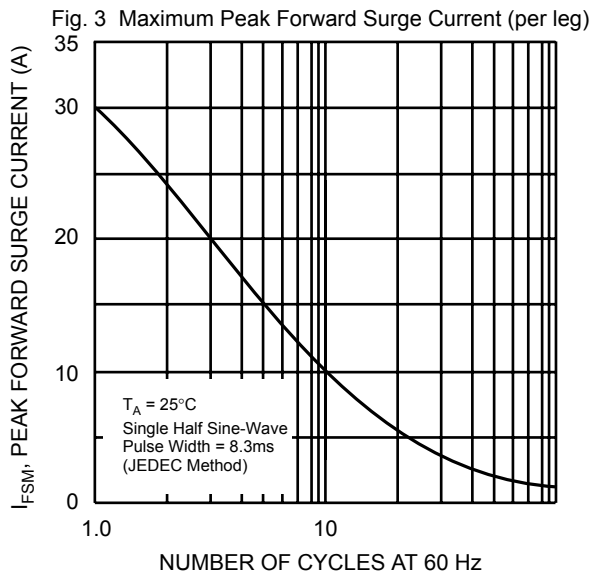
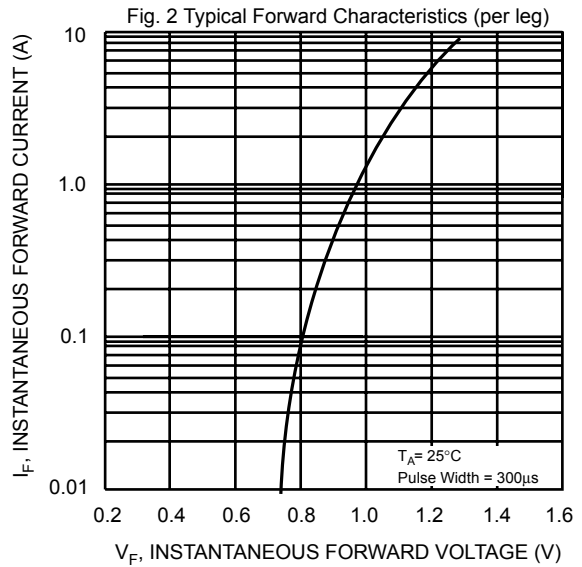
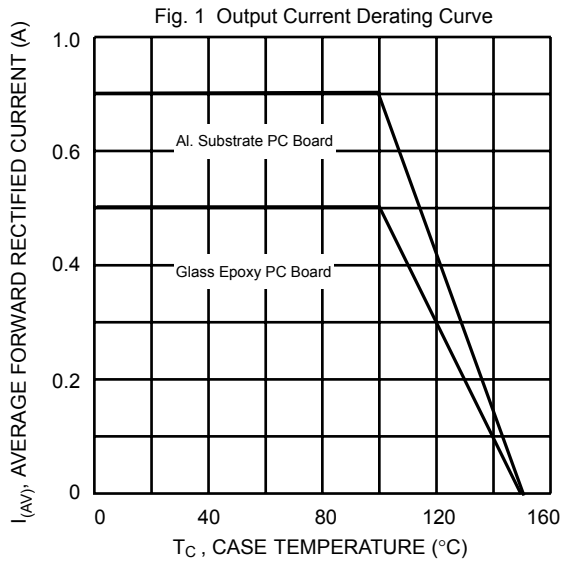
Rating at 25°C ambient temperature unless otherwise specified.  
 Single Phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	MB05M	MB1M	MB2M	MB4M	MB6M	MB8M	MB10M	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$								
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	V
DC Blocking Voltage	$V_{DC}$								
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@ $T_c=100^\circ C$ (Note 2)@ $T_c=100^\circ C$	$I_{F(AV)}$				0.5 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 ( $t < 8.3ms$ )	$I^2t$				3.735				A <sup>2</sup> s
Forward Voltage per element @ $I_F=0.5A$	$V_{FM}$				0.95				V
Forward Voltage per element @ $I_F=0.8A$					1.0				
Peak Reverse Current @ $T_A=25^\circ C$ At Rated DC Blocking Voltage @ $T_A=125^\circ C$	$I_R$				5.0 200				$\mu A$
Typical Junction Capacitance per leg (Note 3)	$C_J$				13				pF
Typical Thermal Resistance per leg	$R_{\theta JA}$				60				°C/W
	$R_{\theta JL}$				16				
Operating and Storage Temperature Range	$T_J, T_{STG}$				-55to+150				°C

- Note:1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.  
 2. Mounted on aluminum substrate PC board with 1.3mm<sup>2</sup> solder pad.  
 3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



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