

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 Working Peak Reverse Voltage DC Blocking Voltage	Vrrm	50	100	200	400	600	800	1000	v
	Vrwm								
	VDC								
RMS Reverse Voltage	VRMS	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@Tc=100 (Note 2)@Tc=100℃	C IF(AV)	0.5 0.8							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	Ігѕм	30							A
I ² t Rating for Fusing (t < 8.3ms)	l²t	3.735						A ² s	
Forward Voltage per element @IF=0.5A Forward Voltage per element @IF=0.8A	Vfm	0.95 1.0							V
Peak Reverse Current @T₄=25℃ At Rated DC Blocking Voltage @T₄=125℃	lĸ	5.0 200							uA
Typical Junction Capacitance per leg (Note 3)	С	13						pF	
Typical Thermal Resistance per leg	Reja		60						
	Rejl	16							
Operating and Storage Temperature Range	TJ,TSTG	-55to+150							°C

Note:1. Mounted on glass epoxy PC board with 1.3mm² solder pad.

- 2. Mounted on aluminum substrate PC board with 1.3mm² solder pad.
- 3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



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PERCENT OF RATED PEAK INVERSE VOLTGE (V)

T_A= 25°C Pulse Width = 300µs

1.2

1.4

T_J= 25°C = 1.0MHz

1.6

100

0.6

0.8

1.0

4 Typical Junction Capacitance

10



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