

# **MB05S THRU MB10S**

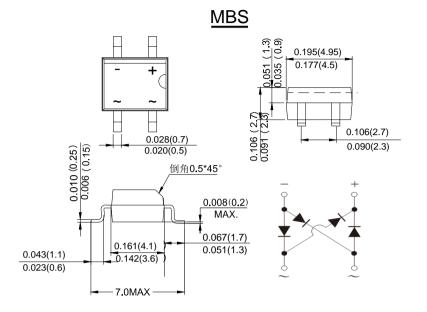
#### SINGLE PHASE 0.8AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

### 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  $25^{\circ}$ C ambient temperature unless otherwise specified. Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBO	MB05S	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
Peak Repetitive Reverse Voltage									
Working Peak Reverse Voltage DC Blocking Voltage	VRWM	50	100	200	400	600	800	1000	V
	VDC								
RMS Reverse Voltage	VRMS	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@T (Note 2)@Tc=	I IF(A)	0.5 0.8				А			
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)			30						Α
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)			3.735						A <sup>2</sup> s
Forward Voltage per element @IF=0.5A @IF=0.8A			0.95 1.0					V	
Peak Reverse Current @TJ=25 At Rated DC Blocking Voltage @TJ=12		5.0 100				uA			
Typical Junction Capacitance (Note 3)			13						pF
Typical Thermal Resistance		60							°C/W
			16						
Operating and Storage Temperature Range		6	-55to+150						$^{\circ}$

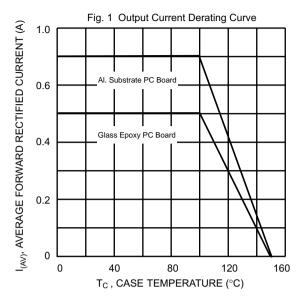
Note:1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.

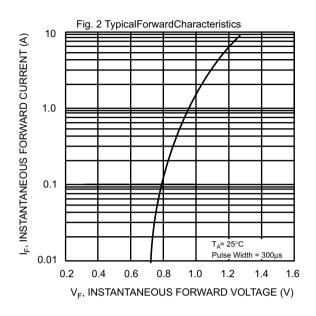
- 2. Mounted on aluminum substrate PC board with 1.3mm<sup>2</sup> solder pad.
- 3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

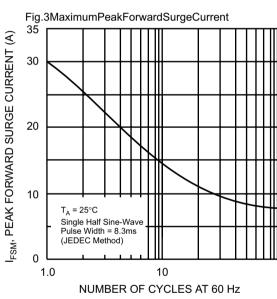
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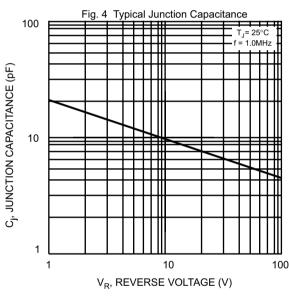


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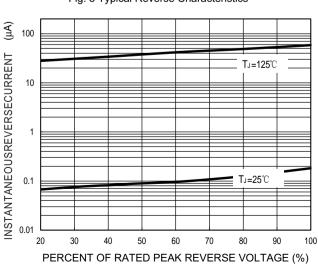




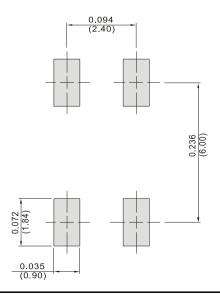








### FIG.6 MOUNTING PAD LAYOUT





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