

## **MB05S THRU MB10S**

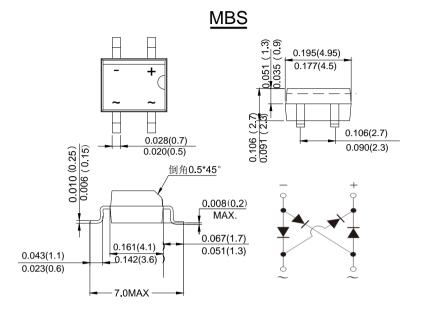
#### SINGLE PHASE 0.8AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

### 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°C ambient temperature unless otherwise specified. Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	SY	YMBOL	MB05S	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
Peak Repetitive Reverse Voltage		Vrrm								
Working Peak Reverse Voltage DC Blocking Voltage	,	Vrwм	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)@Tc=100℃ (Note 2)@Tc=100℃		IF(AV)	0.5 0.8							Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)		Іғѕм	30						А	
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)		l <sup>2</sup> t	3.735						A <sup>2</sup> s	
Forward Voltage per element @IF=0.5A @IF=0.8A		VFM	0.95 1.0					V		
Peak Reverse Current @TJ=25 At Rated DC Blocking Voltage @TJ=125		lr	5.0 100							uA
Typical Junction Capacitance (Note 3)		Сл	13						pF	
Typical Thermal Resistance		RөJA	60							°C/W
		Rejl	16							
Operating and Storage Temperature Range		J,Tstg	-55to+150							$^{\circ}\mathbb{C}$

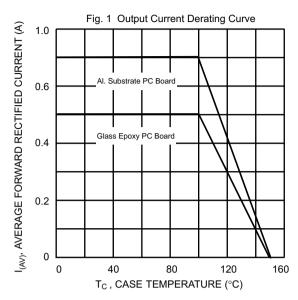
Note:1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.

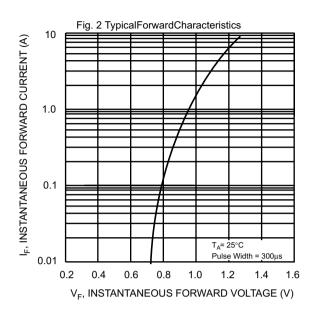
- 2. Mounted on aluminum substrate PC board with 1.3mm<sup>2</sup> solder pad.
- 3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

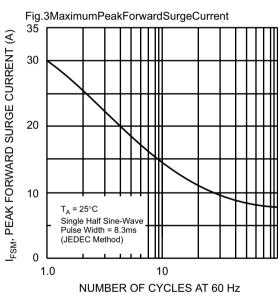
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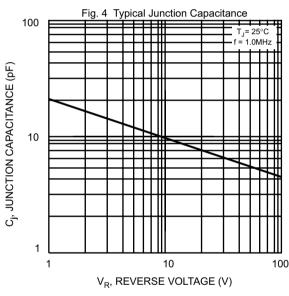


Fig. 5 Typical Reverse Characteristics

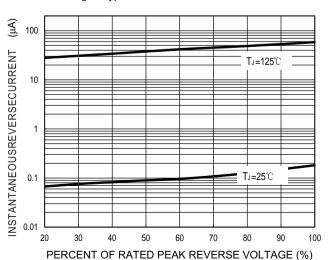
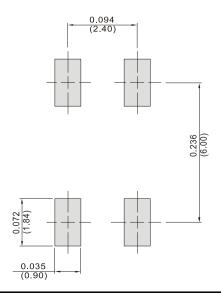


FIG.6 MOUNTING PAD LAYOUT





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