

MB05S THRU MB10S

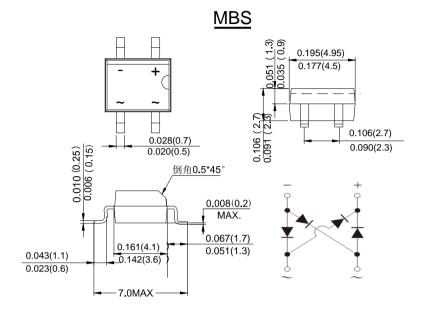
SINGLE PHASE 0.8AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

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 | SYMBOL | MB05S | MB1S | MB2S | MB4S | MB6S | MB8S | MB10S | 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 ℃ | IFIAVI | 0.5 0.8 | | | | | | | Α |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | Ігѕм | 30 | | | | | | | Α |
| I ² t Rating for Fusing (t < 8.3ms) | l²t | 3.735 | | | | | | A ² s | |
| Forward Voltage per element @IF=0.5A @IF=0.8A | V _{FM} | 0.95 1.0 | | | | | | | ٧ |
| Peak Reverse Current @T _A =25℃ At Rated DC Blocking Voltage @T _A =125℃ | lR | 5.0 200 | | | | | | uA | |
| Typical Junction Capacitance per leg (Note 3) | Сл | 13 | | | | | | | pF |
| Typical Thermal Resistance per leg | Rеја | 60 | | | | | | | °C/W |
| | Rejl | 16 | | | | | | | |
| Operating and Storage Temperature Range | T _J ,Тsтg | -55to+150 | | | | | | | $^{\circ}$ |

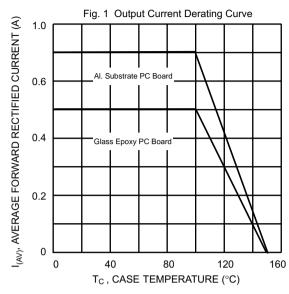
Note:1. Mounted on glass epoxy PC board with 1.3mm² solder pad.

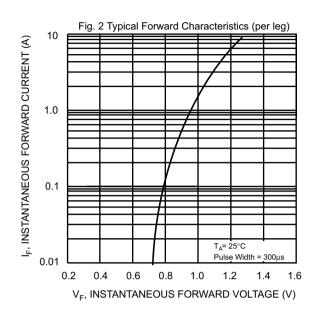
- 2. Mounted on aluminum substrate PC board with 1.3mm² solder pad.
- 3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

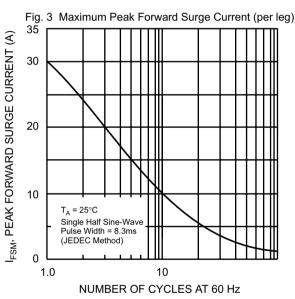
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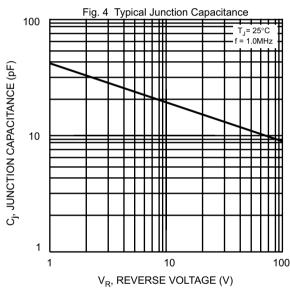
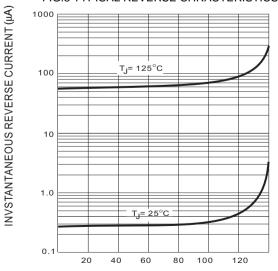
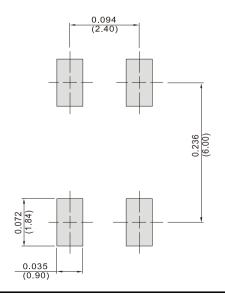


FIG.5 TYPICAL REVERSE CHRACTERISTICS



PERCENT OF RATED PEAK INVERSE VOLTGE (V)

FIG.6 MOUNTING PAD LAYOUT





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