



MB05F THRU MB10F

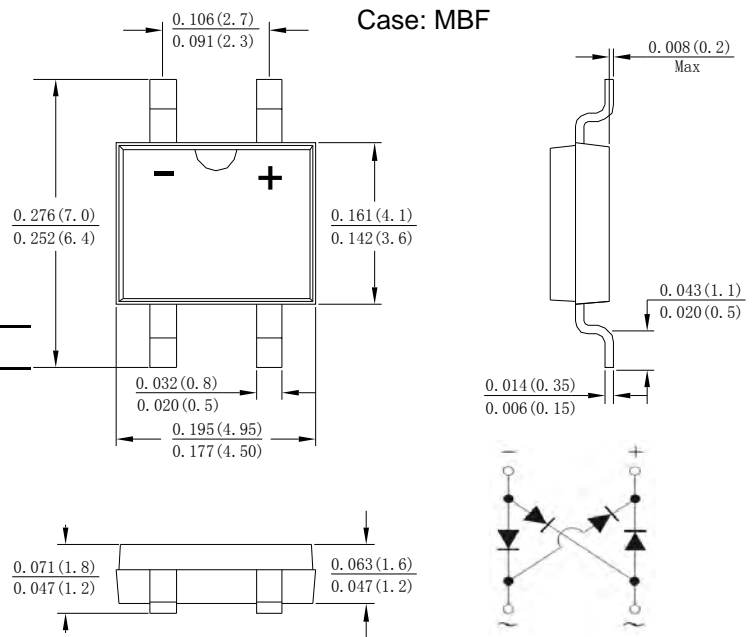
Single Phase 0.8AMP Surface Mount Glass Passivated Bridge Rectifier

Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: MB-F, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number
- Lead Free: For RoHS / Lead Free Version,



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	MB05F	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	UNITS
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RWM}								
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 °C (Note 2)@T _C =100 °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 ² t Rating for Fusing (t < 8.3ms)	I ² t	3.735							A ² s
Forward Voltage per element @IF=0.5A @IF=0.8A	V _{FM}	0.95 1.0							V
Peak Reverse Current @T _J =25 °C At Rated DC Blocking Voltage @T _J =125 °C	I _R	5.0 100							uA
Typical Junction Capacitance (Note3)	C _J	13							pF
Typical Thermal Resistance	R _{θJA}	60							°C/W
	R _{θJL}	16							
Operating and Storage Temperature Range	T _J , T _{STG}	-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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Fig. 1 Output Current Derating Curve

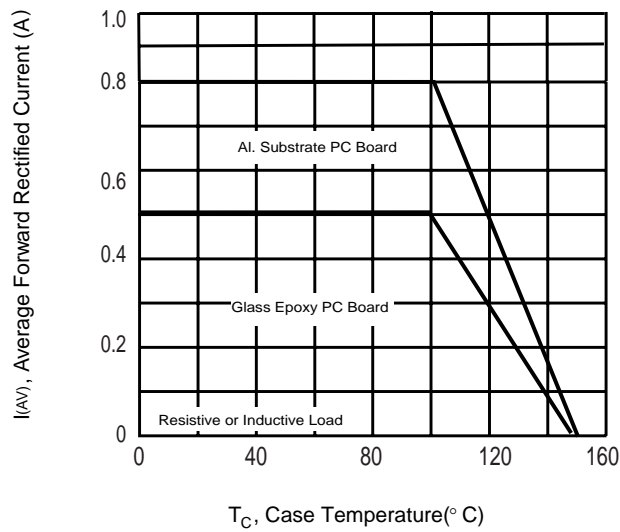


Fig. 2 Typical Forward Characteristics

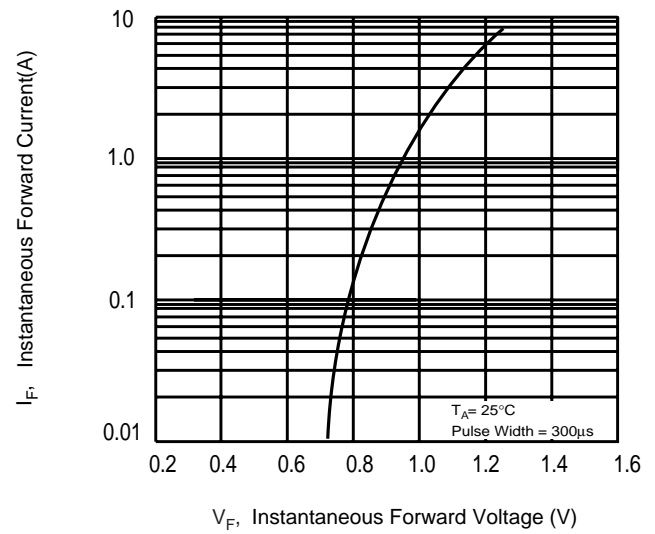


Fig.3 Maximum Peak Forward Surge Current

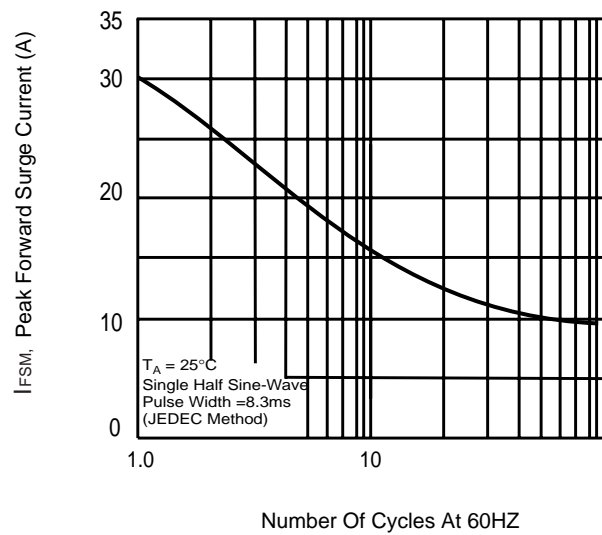


Fig. 4 Typical Junction Capacitance

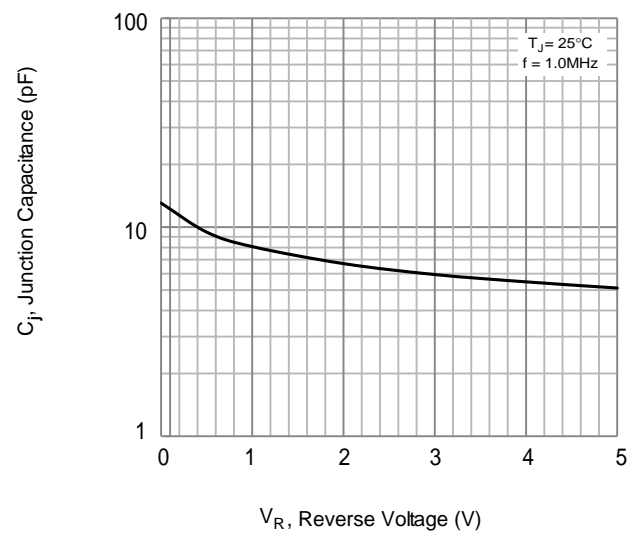


Fig.5 Typical Reverse Characteristics

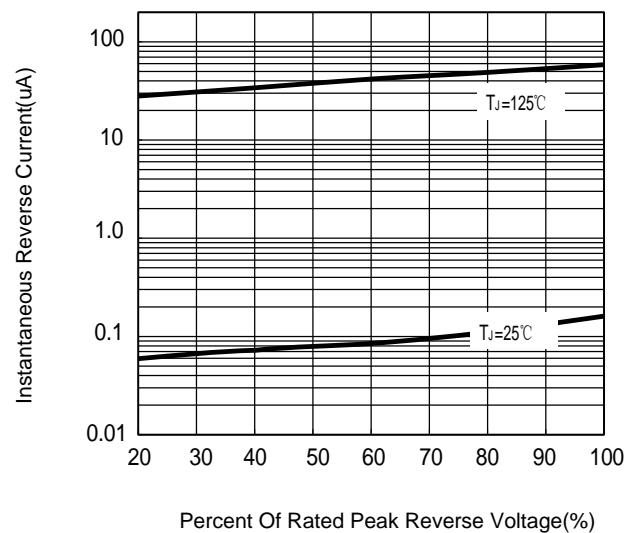
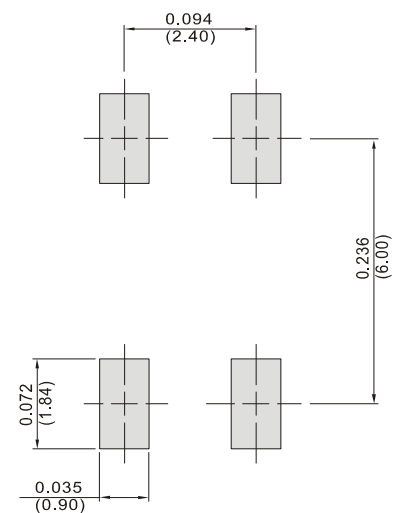


Fig.6 Mounting Pad Layout





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