Single Phase 0.8AMP Surface Mount Glass Passivated Bridge Rectifier

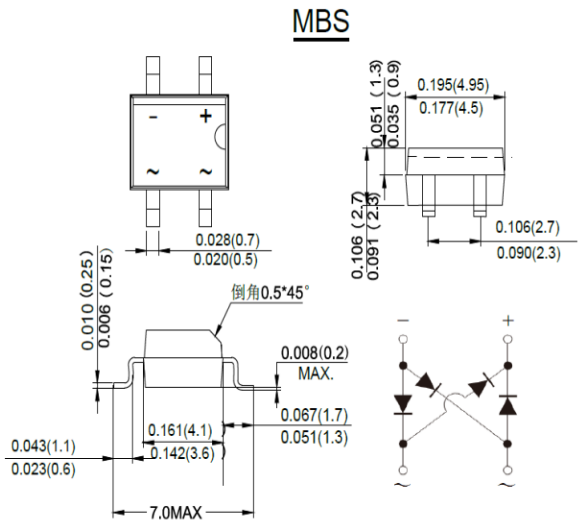
MB05S THRU MB10S

Features

- Glass Passivated Die Construction
- Low leakage
- Ideal for printed circuit board
- Surge overload rating-35A 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℃ 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	V_{RRM} V_{RWM} V_{DC}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@T_C =100℃ (Note 2)@T_C =100℃	$I_{F(AV)}$	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
Forward Voltage per element @I_F=0.5A @I_F=1.0A	V_{FM}	0.95 1.0							V
Peak Reverse Current @T_A=25℃ At Rated DC Blocking Voltage @T_A=125℃	I_R	5.0 200							uA
Typical Thermal Resistance per leg	$R_{\theta JA}$	60							℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55to+150							℃

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.

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Characteristic Curves

Fig. 1 Output Current Derating Curve

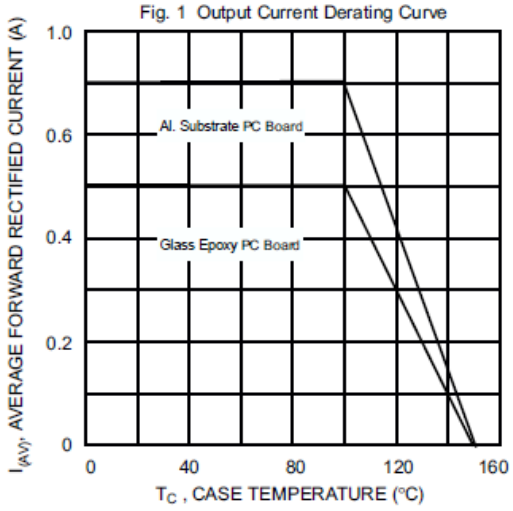

Fig. 2 Typical Forward Characteristics (per leg)

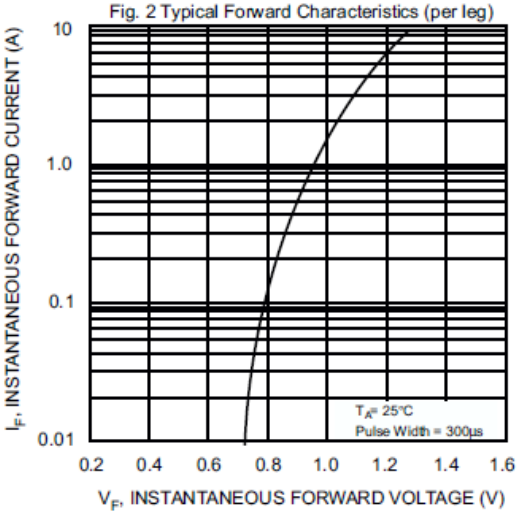

Fig. 3 Maximum Peak Forward Surge Current (per leg)

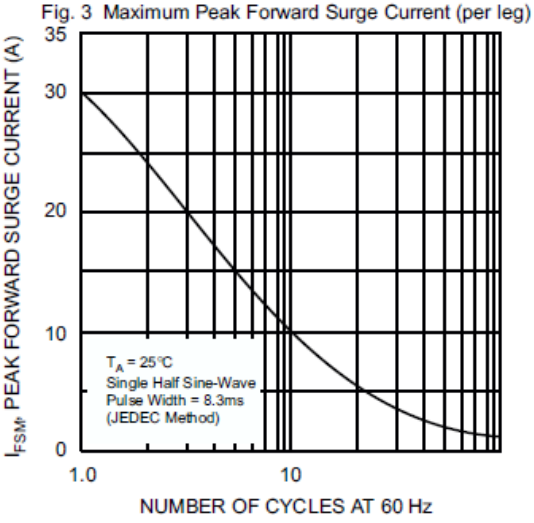

Fig. 4 Typical Junction Capacitance

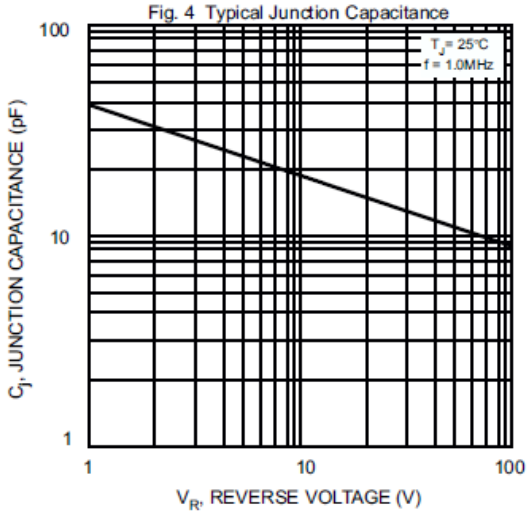

FIG.5 TYPICAL REVERSE CHRACTERISTICS

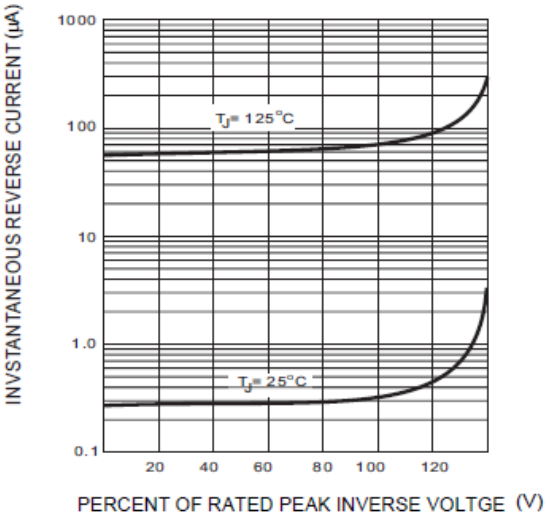

FIG.6 MOUNTING PAD LAYOUT