

# MB2S THRU MB10S

Single Phase 0.8 AMPS.  
Silicon Bridge Rectifiers

**Voltage Range**  
**200 to 1000 Volts**  
**Current**  
**0.8 Amperes**

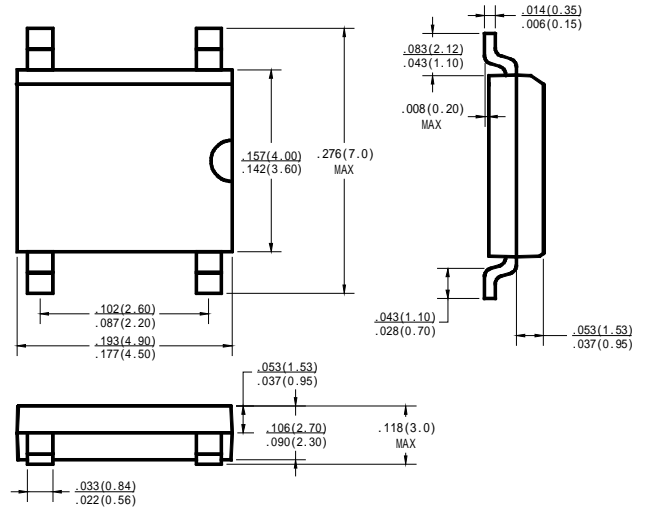
### Features

- UL Recognized File # E-230084
- Ideal for printed circuit board
- Reliable low cost construction technique results in inexpensive product
- High temperature soldering guaranteed:  
260°C / 10 seconds / 0.375" ( 9.5mm )  
lead length at 5 lbs., ( 2.3 kg ) tension

### Mechanical Data

- Case: Molded plastic
- Lead: solder plated
- Polarity: As marked

MBS



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number		MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	140	280	420	560	700	V
Maximum DC blocking Voltage	V <sub>DC</sub>	200	400	600	800	1000	V
Maximum Average Forward Rectified Current On glass-epoxy P.C.B. On aluminum substrate	I <sub>(AV)</sub>	0.5 0.8					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	I <sub>FSM</sub>	35					A
Maximum Instantaneous Forward Voltage @ 0.4A	V <sub>F</sub>	1.0					V
Maximum DC Reverse Current @ TA=25°C rated DC blocking voltage per leg TA = 125°C	I <sub>R</sub>	5.0 500					μ A
Typical Thermal Resistance (Note1) (Note2)	R θ JA R θ JL	70 20					°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150					°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150					°C

**NOTE:** 1. On aluminum substrate P.C.B. with an area of 0.8 × 0.8" (20 × 20mm) mounted on 0.05 × 0.05" (1.3 × 1.3mm) solder pad.

2. On glass epoxy P.C.B. mounted on 0.05 × 0.05" (1.3 × 1.3mm) pads.

# RATING AND CHARACTERISTIC CURVES MB2S THRU MB10S

FIG.1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

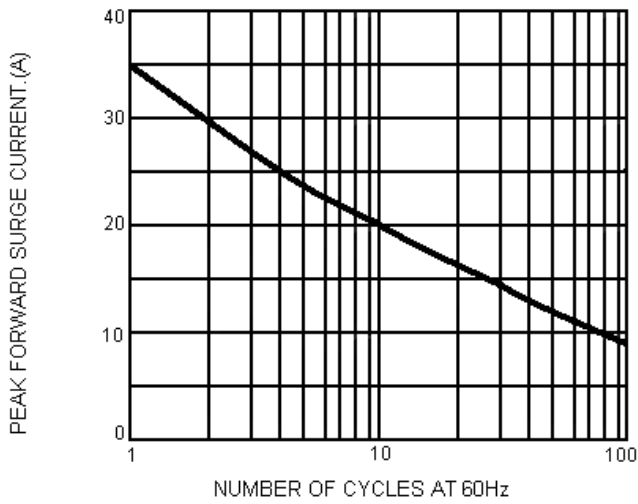


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

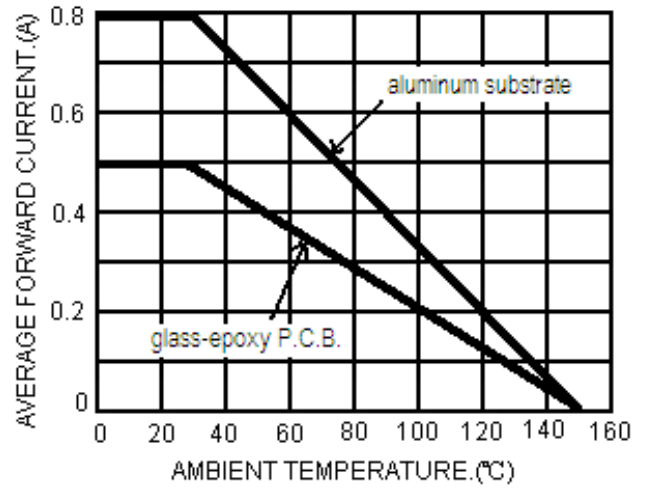


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

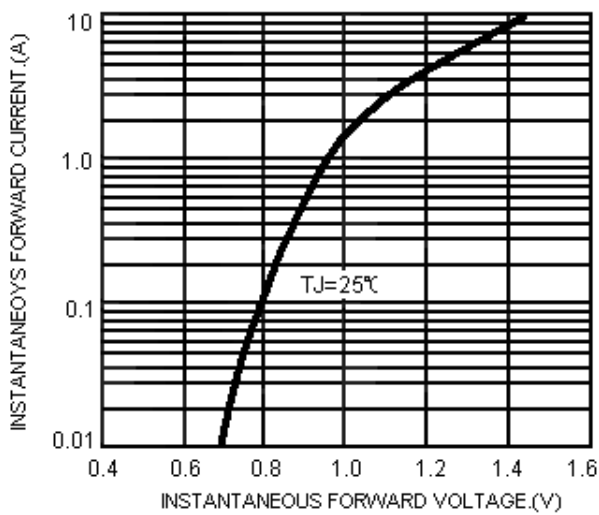


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

