

# MB2S

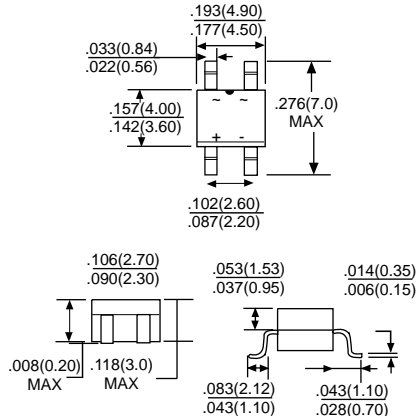
## SINGLE PHASE 0.5 AMPS. GLASS PASSIVATED BRIDGE RECTIFIERS

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

### Features

- \*Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- \*High surge current capability
- \*High temperature soldering guaranteed:  
260°C / 10 seconds at 5 lbs.,(2.3kg) tension
- \*Small size, simple installation
- \*Leads solderable per MIL-STD-202 Method 208

### MBS



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		MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
		mb2s	mb4s	mb6s	mb8s	mb10s	
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 at T <sub>A</sub> = 30°C On glass-epoxy P.C.B. On aluminum substrate	I <sub>F(AV)</sub>	0.5 0.8					A
Peak Forward Surge Current, 8.3 ms Single Half Sinewave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	35					A
Maximum Instantaneous Forward Voltage Drop Per Leg @ 0.4A	V <sub>F</sub>	1.0					V
Maximum DC Reverse Current at Rated DC Blocking Voltage T <sub>A</sub> = 25°C T <sub>A</sub> = 100°C	I <sub>R</sub>	5.0 100					uA uA
Typical Junction Capacitance Per Leg (Note3)	C <sub>J</sub>	15					pF
Typical Thermal Resistance Per Leg	R <sub>θJA</sub>	75					°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 glass epoxy P.C.B mounted on 0.05x 0.05" (1.3x1.3mm) pads  
2. On aluminum substrate P.C.B with on area of 0.8" x 0.8" (20x20mm) mounted on 0.05x 0.05" (1.3x1.3mm) solder pad  
3. Measured at 1.0MHz and applied reverse voltage of 4.0 volts.