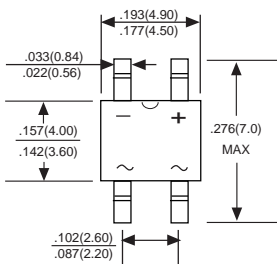


# MB2S THRU MB10S

## SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Voltage Range - 200 to 1000 Volts Current - 0.5/0.8 Ampere

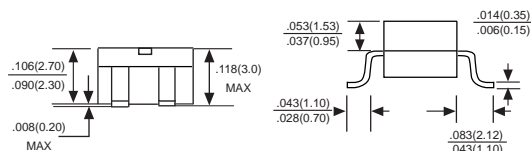
### MBS



### FEATURES

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs., (2.3kg) tension
- Small size, simple installation
- High surge current capability
- Glass passivated chip junction
- Green compound(halogen&Sb<sub>2</sub>O<sub>3</sub> free)

### MECHANICAL DATA



**Case:** Molded plastic body

**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026

**Polarity:** Polarity symbols marked on case

**Mounting Position:** Any

Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load derate current by 20%.

	SYMBOLS	MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	200	400	600	800	1000	V
Maximum average forward rectified current On glass-epoxy P.C.B.(Note1) On aluminum substrate(Note2)	$I_{F(AV)}$			0.5 0.8			A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$			20			A
Maximum instantaneous forward voltage drop per leg at 0.4A	$V_F$			1.0			V
Maximum DC reverse current at rated DC blocking voltage	$I_R$			5 100			$\mu A$ $\mu A$
Typical thermal resistance(NOTE 3)	$R_{\theta JL}$			26			°C/W
	$R_{\theta JA}$			87			
Operating temperature range	$T_J$			-55 to +150			°C
storage temperature range	$T_{STG}$			-55 to +150			°C

NOTES:1. On glass epoxy P.C.B. mounted on 0.05x0.05"(1.3x1.3mm) pads

2. On aluminum substrate P.C.B. with an area of 0.8"x0.8"(20x20mm) mounted on 0.05X0.05"(1.3X1.3mm) solder pad

3. Thermal resistance from junction to ambient and junction to lead mounted on P.C.B. with 0.2X0.2"(5X5mm) copper pads.

## RATINGS AND CHARACTERISTIC CURVES MB2S THRU MB10S

FIG.1 FORWARD DERATING CURVE

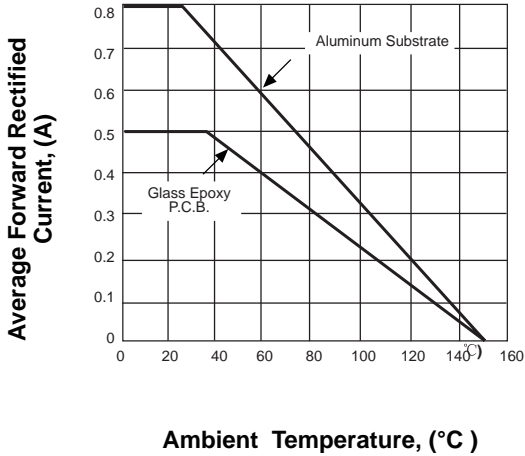


FIG.2 PEAK FORWARD SURGE CURRENT

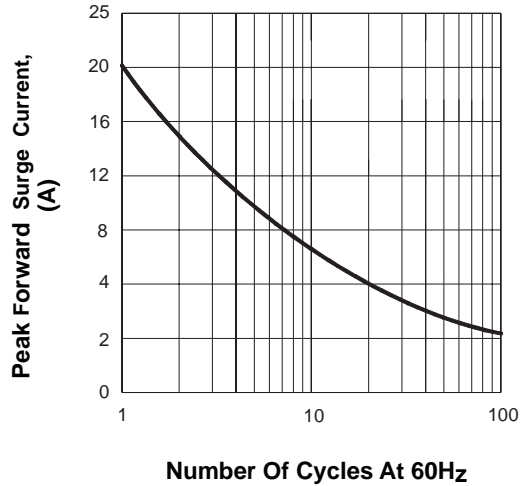


FIG.3 TYPICAL FORWARD CHARACTERISTICS

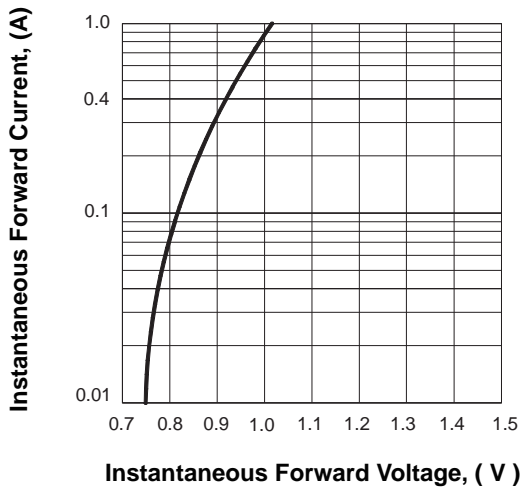


FIG.4 TYPICAL REVERSE CHARACTERISTICS

