



# RMB2S THRU RMB10S

Voltage Range - 200 to 1000 V olts Current - 0.5/0.8 Ampere

## GLASS PASSIVATED FAST RECOVERY BRIDGE RECTIFIERS

### Features

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ High temperature soldering guaranteed: 260°/10 seconds at 5 lbs., (2.3kg) tension
- ◆ Small size, simple installation
- ◆ High surge current capability

### Mechanical Data

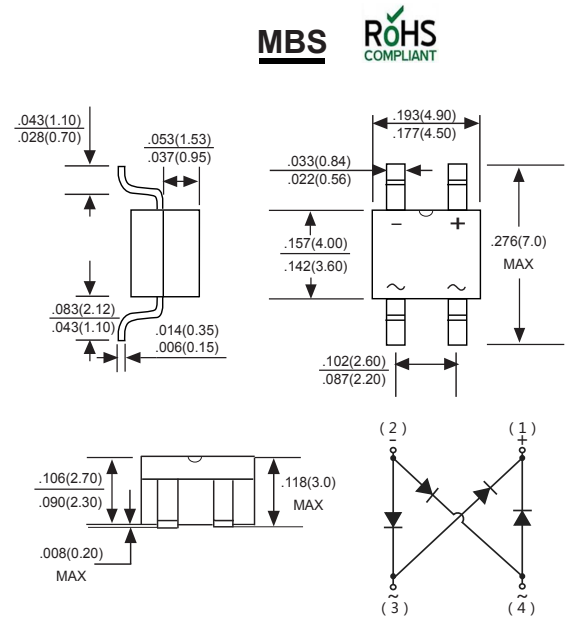
**Case :** JEDEC MBS Molded plastic body

**Terminals :** Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity :** Polarity symbol marking on body

**Mounting Position :** Any

**Weight :** 0.0035 ounce, 0.1 grams



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 current derate by 20%.

| Parameter                                                                                                 | SYMBOLS                            | MDD<br>RMB2S | MDD<br>RMB4S | MDD<br>RMB6S | MDD<br>RMB8S | MDD<br>RMB10S | UNITS         |
|-----------------------------------------------------------------------------------------------------------|------------------------------------|--------------|--------------|--------------|--------------|---------------|---------------|
| Marking Code                                                                                              |                                    |              |              |              |              |               |               |
| 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<br>On glass-epoxy P.C.B.(Note1)<br>On aluminum substrate(Note2) | $I_{F(AV)}$                        | 0.5<br>0.8   |              |              |              |               | A             |
| Peak forward surge current,<br>8.3ms single half sine-wave superimposed on<br>rated load (JEDEC Method)   | $I_{FSM}$                          | 30           |              |              |              |               | A             |
| Maximum instantaneous forward voltage drop<br>per leg at 0.4A                                             | $V_F$                              | 1.3          |              |              |              |               | V             |
| Maximum DC reverse current $T_A=25^{\circ}C$<br>at rated DC blocking voltage $T_A=125^{\circ}C$           | $I_R$                              | 5<br>500     |              |              |              |               | $\mu A$       |
| Maximum reverse recovery time (NOTE 4)                                                                    | $t_{rr}$                           | 150          |              | 250          |              | 500           | ns            |
| Typical thermal resistance(NOTE 3)                                                                        | $R_{\theta JL}$<br>$R_{\theta JA}$ | 28<br>85     |              |              |              |               | $^{\circ}C/W$ |
| Operating temperature range                                                                               | $T_J$                              | -55 to +150  |              |              |              |               | $^{\circ}C$   |
| storage temperature range                                                                                 | $T_{STG}$                          | -55 to +150  |              |              |              |               | $^{\circ}C$   |

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.

4. Reverse recovery condition  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{rr}=0.25A$ .



## Ratings And Characteristic Curves

FIG.1 FORWARD DERATING CURVE

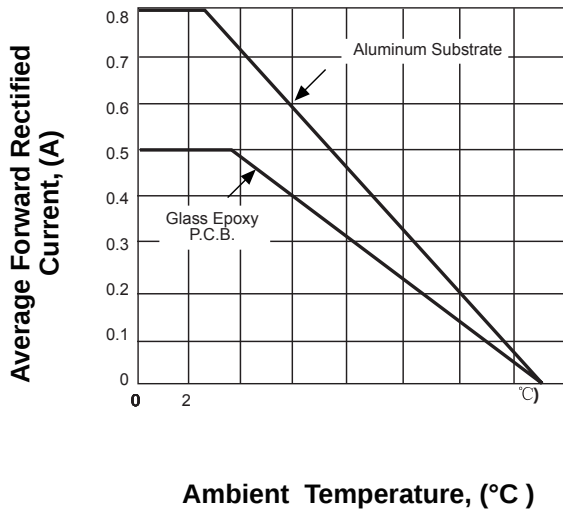


FIG.2 PEAK FORWARD SURGE CURRENT

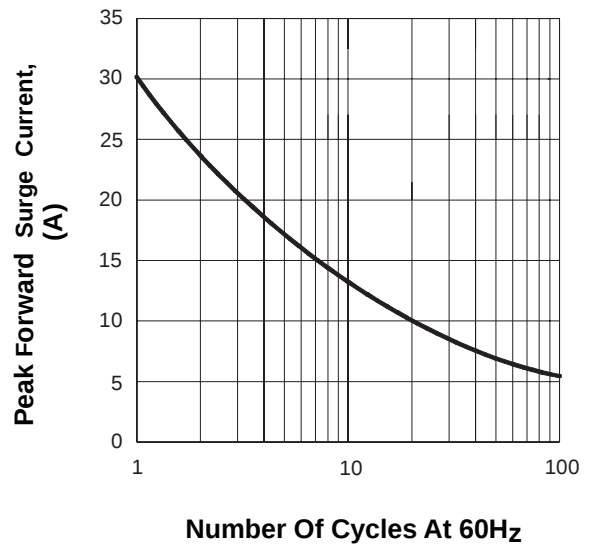


FIG.3 TYPICAL FORWARD CHARACTERISTICS

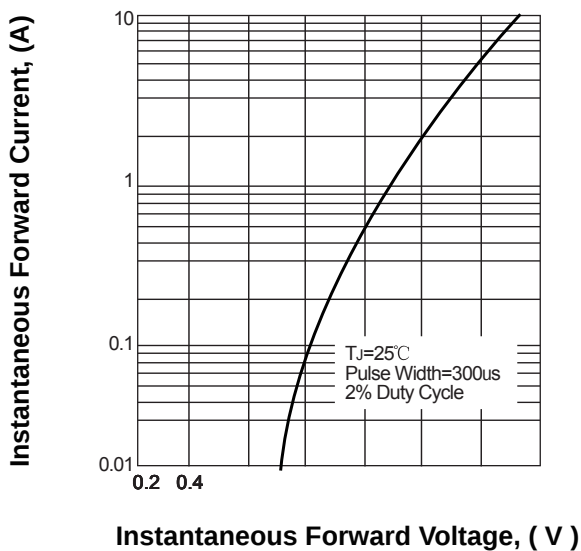
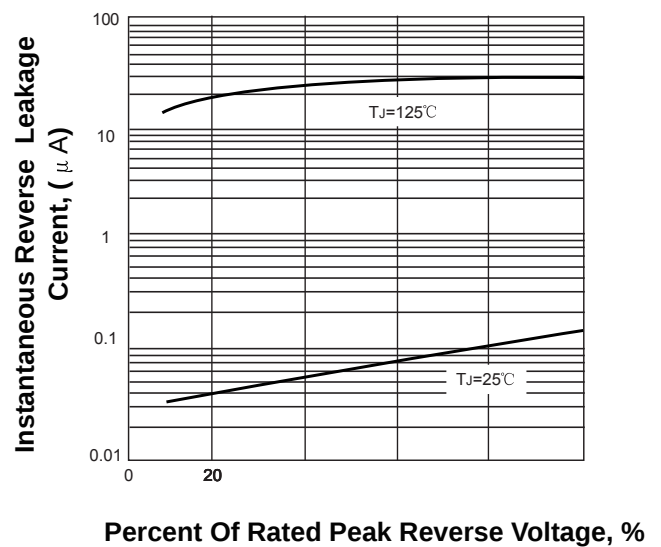
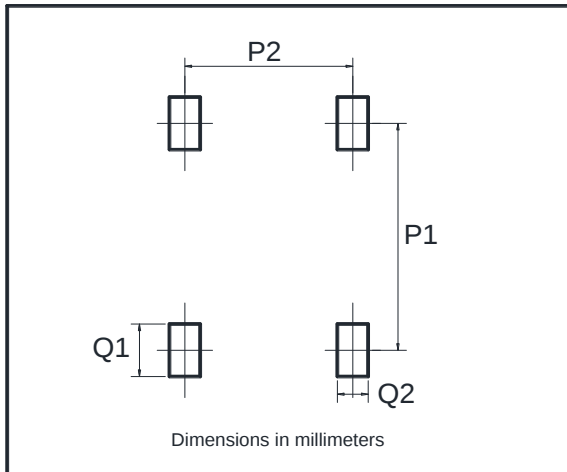


FIG.4 TYPICAL REVERSE CHARACTERISTICS



The curve above is for reference only.

## Suggested Pad Layout



| Dim | Min  |
|-----|------|
| P1  | 6.00 |
| P2  | 2.40 |
| Q1  | 1.84 |
| Q2  | 1.20 |