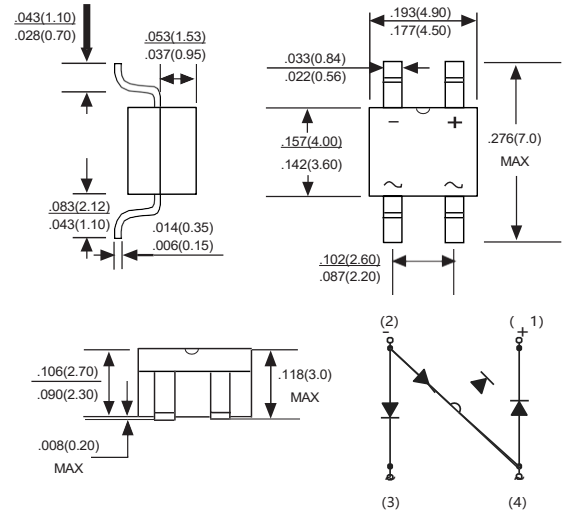


## Schottky Surface Mount Flat Bridge Rectifier

### 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

### MBS



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            | MB24S       | MB26S | MB28S    | MB210S | MB220S | UNITS |
|-----------------------------------------------------------------------------------------------------------------|--------------------|-------------|-------|----------|--------|--------|-------|
| Marking Code                                                                                                    |                    |             |       |          |        |        |       |
| Maximum repetitive peak reverse voltage                                                                         | V <sub>RRM</sub>   | 40          | 60    | 80       | 100    | 200    | V     |
| Maximum RMS voltage                                                                                             | V <sub>RMS</sub>   | 28          | 42    | 56       | 70     | 140    | V     |
| Maximum DC blocking voltage                                                                                     | V <sub>DC</sub>    | 40          | 60    | 80       | 100    | 200    | V     |
| Maximum average forward rectified current                                                                       | I <sub>F(AV)</sub> | 2.0         |       |          |        |        | A     |
| Peak forward surge current,<br>8.3ms single half sine-wave superimposed on<br>rated load (JEDEC Method)         | I <sub>FSM</sub>   | 50          |       | 40       |        |        | A     |
| Maximum instantaneous forward voltage at 2A                                                                     | V <sub>F</sub>     | 0.55        | 0.70  | 0.85     |        |        | V     |
| Maximum DC reverse current      T <sub>A</sub> =25°C<br>at rated DC blocking voltage      T <sub>A</sub> =100°C | I <sub>R</sub>     | 0.5<br>10   |       | 0.3<br>5 |        |        | mA    |
| Typical junction capacitance at 4.0V,1.0MHz                                                                     | C <sub>J</sub>     | 220         | 80    |          |        |        | pF    |
| Typical thermal resistance (Note1)                                                                              | RθJA               | 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. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

## Ratings And Characteristic Curves

Fig.1 Forward Current Derating Curve

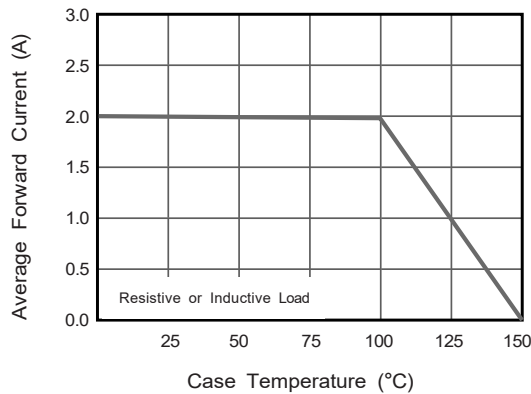


Fig.2 Typical Reverse Characteristics

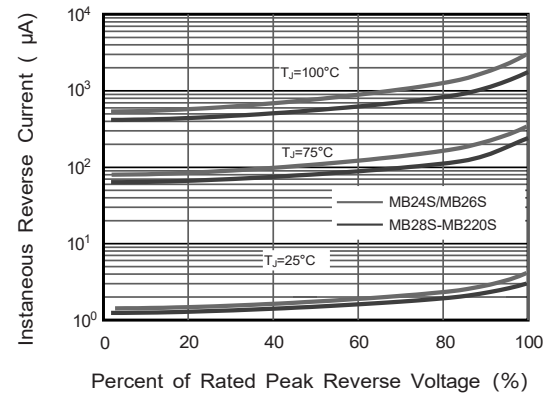


Fig.3 Typical Forward Characteristic

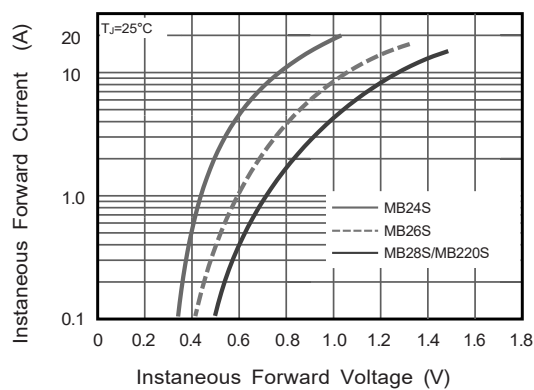


Fig.4 Typical Junction Capacitance

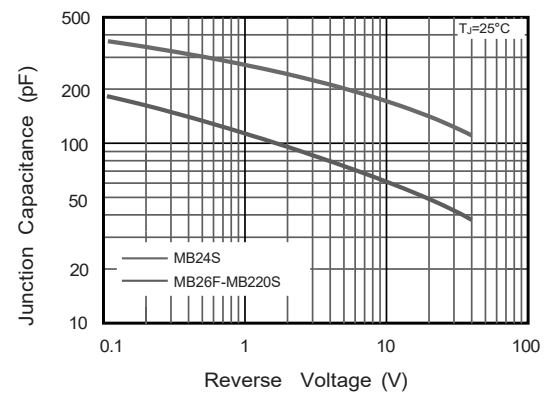


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

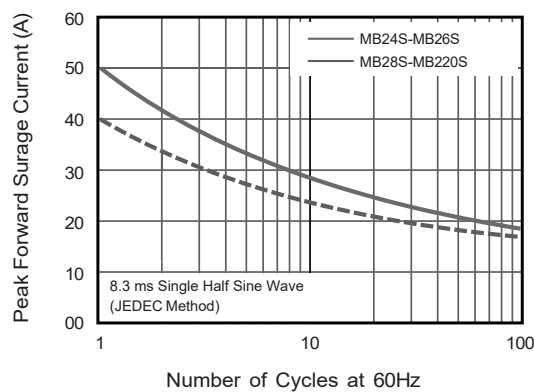
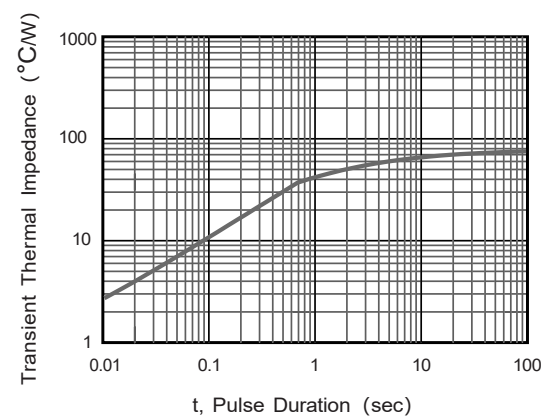
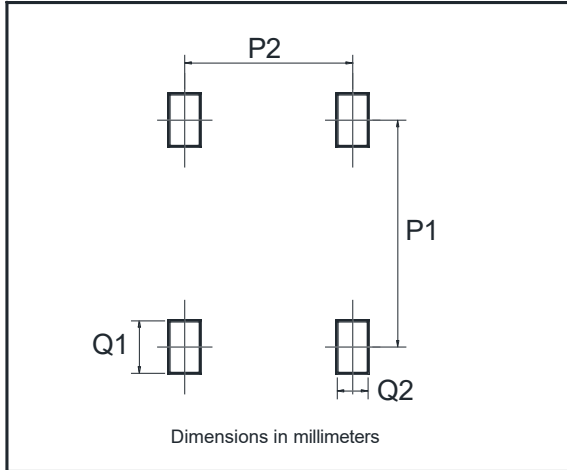


Fig.6 Typical Transient Thermal Impedance



The curve above is for reference only.



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