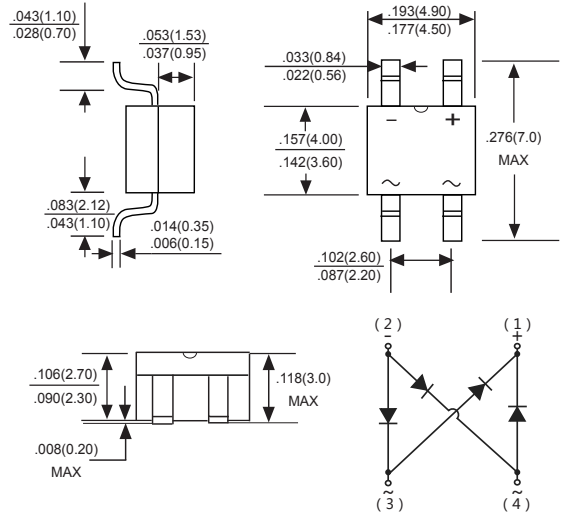


Schottky Surface Mount Flat Bridge Rectifier

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



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 : 0.008 ounce, 0.22 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 | MDD | MDD | MDD | MDD | UNITS | |
|---|-----------------|-------------|-------|----------|--------|--------|-------|---|
| | | MB24S | MB26S | MB28S | MB210S | MB220S | | |
| Marking Code | | | | | | | | |
| Maximum repetitive peak reverse voltage | V_{RRM} | 40 | 60 | 80 | 100 | 200 | V | |
| Maximum RMS voltage | V_{RMS} | 28 | 42 | 56 | 70 | 140 | V | |
| Maximum DC blocking voltage | V_{DC} | 40 | 60 | 80 | 100 | 200 | V | |
| Maximum average forward rectified current | $I_{F(AV)}$ | 2.0 | | | | | | A |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 50 | | 40 | | | | A |
| Maximum instantaneous forward voltage at 2A | V_F | 0.55 | 0.70 | 0.85 | | | V | |
| Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$ | I_R | 0.5 10 | | 0.3 5 | | | mA | |
| Typical junction capacitance at 4.0V, 1.0MHz | C_j | 220 | 80 | | | | pF | |
| Typical thermal resistance (Note1) | $R_{\theta JA}$ | 75 | | | | | °C/W | |
| Operating temperature range | T_J | -55 to +150 | | | | | °C | |
| storage temperature range | T_{STG} | -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

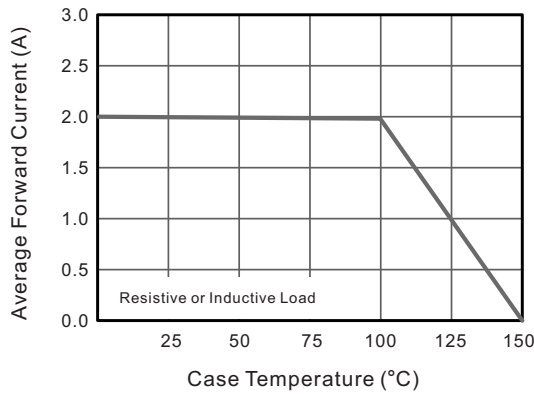


Fig.2 Typical Reverse Characteristics

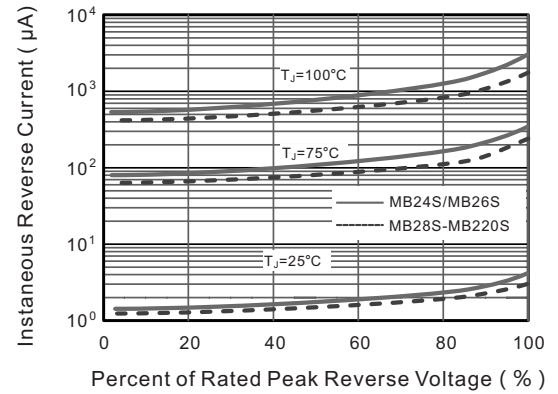


Fig.3 Typical Forward Characteristic

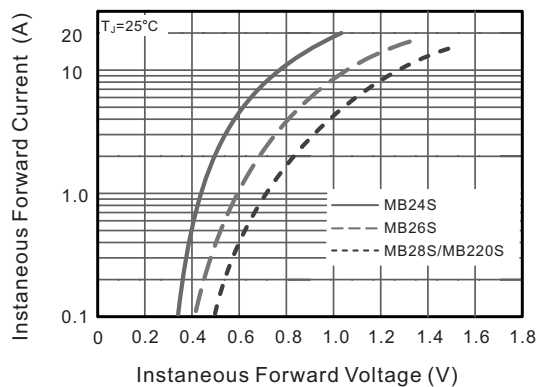


Fig.4 Typical Junction Capacitance

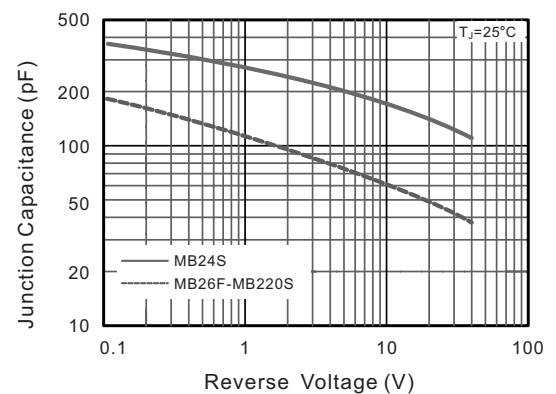


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

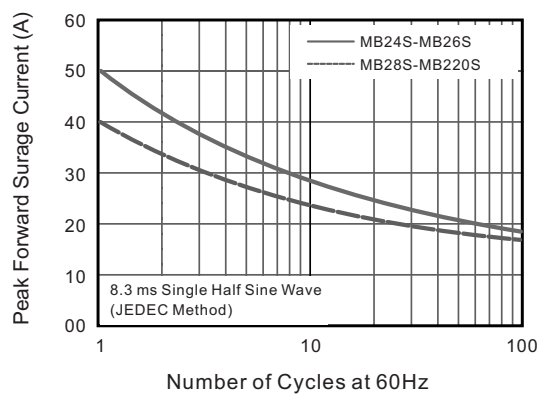
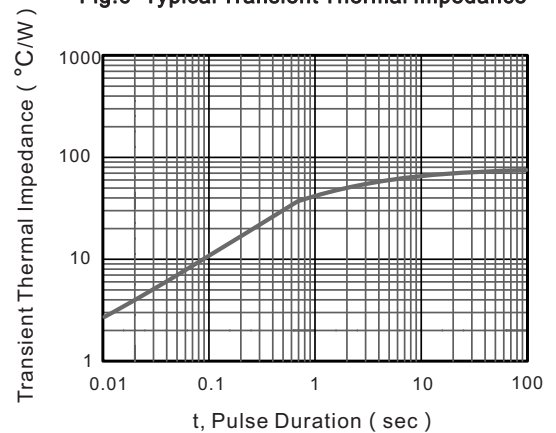
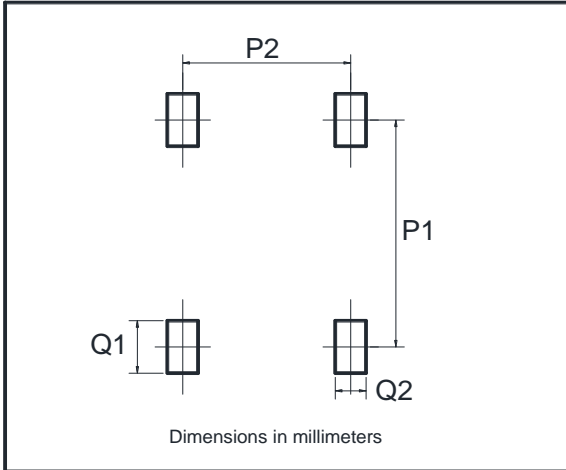


Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.

Suggested Pad Layout



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