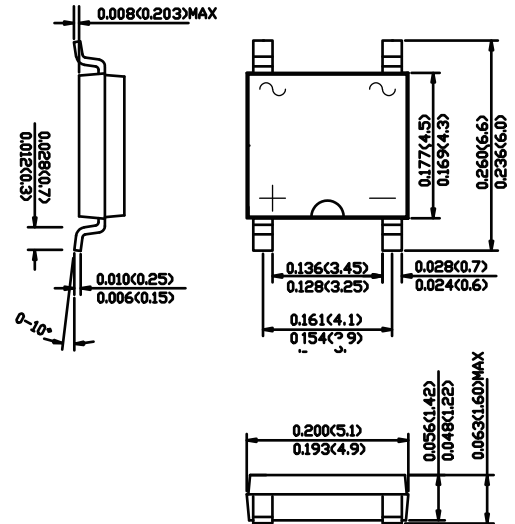


SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

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
- ◆ Glass passivated chip junction

TBS **ROHS COMPLIANT**



Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC TBS Molded plastic body

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

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.003 ounce, 0.098 grams

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 | |
|---|-----------------|-------------|-------|----------|--------|----------|----------|------|
| | | TB14S | TB16S | TB18S | TB110S | TB120S | | |
| 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 | $I_{F(AV)}$ | 1.0 | | | | | | A |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 40 | | 30 | | | | A |
| Maximum instantaneous forward voltage drop per leg at 1A | V_F | 0.55 | 0.70 | 0.85 | | | | V |
| Maximum DC reverse current at rated DC blocking voltage | I_R | 0.3 10 | | 0.2 5 | | 0.1 2 | mA mA | |
| Typical thermal resistance | $R_{\theta JA}$ | 95 | | | | | | °C/W |
| Typical junction capacitance | C_j | 110 | 80 | | | | | pF |
| Operating temperature range | T_J | -55 to +150 | | | | | | °C |
| storage temperature range | T_{STG} | -55 to +150 | | | | | | °C |

NOTE: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy P C board with 4 X (5X5mm) copper pad.

Ratings And Characteristic Curves

Fig.1 Forward Current Derating Curve

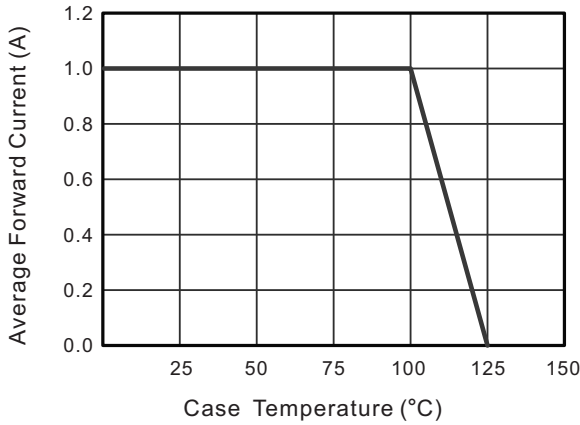


Fig.2 Typical Reverse Characteristics

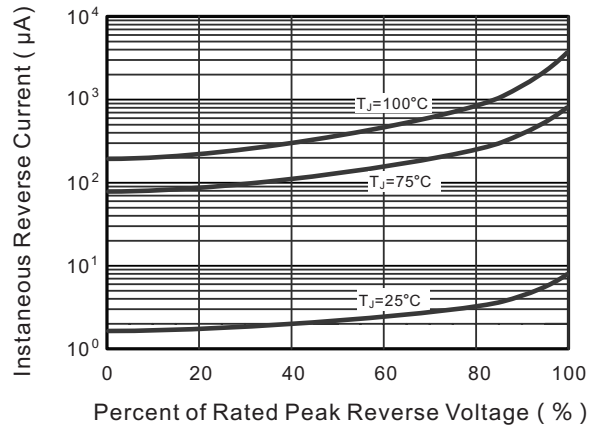


Fig.3 Typical Forward Characteristic

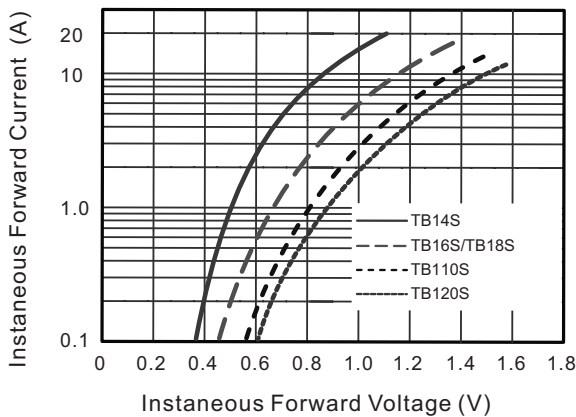


Fig.4 Typical Junction Capacitance

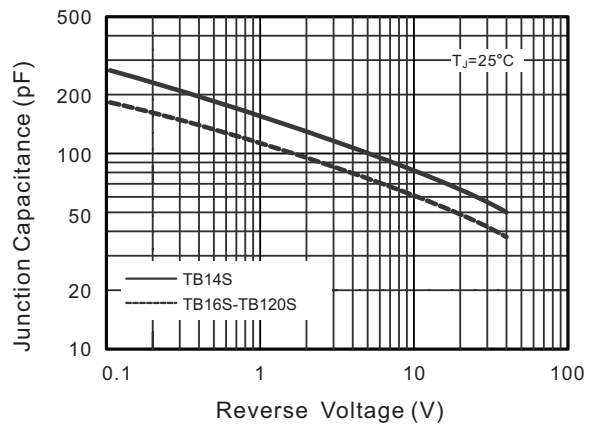


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

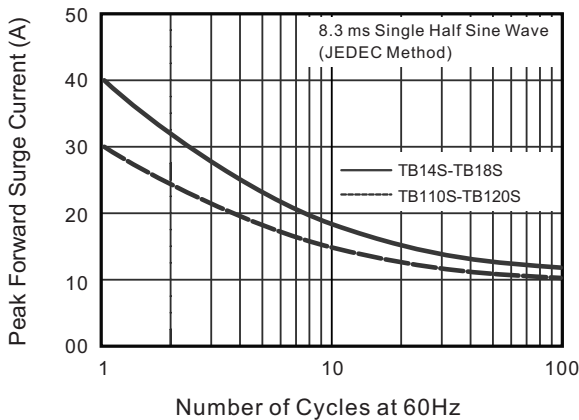
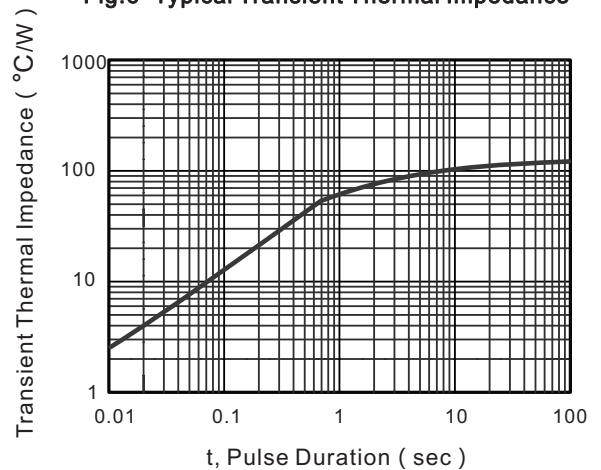


Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.