

1.5A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER
Feature

- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- Forward Current – 1.5A
- High Surge Current Capability
- Designed for Surface Mount Application

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

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

| Parameter | Symbol | TB1 S-15 | TB2 S-15 | TB4 S-15 | TB6 S-15 | TB8 S-15 | TB10 S-15 | Units |
|--|-------------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Average Rectified Output Current at $T_a = 40\text{ °C}$ | I_o | 1.5 | | | | | | A |
| Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load(JEDEC Method) | I_{FSM} | 50 | | | | | | A |
| | Typical I_{FSM} | 55 | | | | | | |
| Maximum Forward Voltage at 1.5A | V_F | 1.1 | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a=25\text{ °C}$ $T_a=125\text{ °C}$ | I_R | 5.0 | | | | | | μA |
| | | 100 | | | | | | |
| Typical Junction Capacitance (Note1) | C_j | 13 | | | | | | PF |
| Typical Thermal Resistance (Note2) | $R_{\theta JA}$ | 160 | | | | | | °C/W |
| | $R_{\theta JL}$ | 25 | | | | | | |
| Operating and Storage Temperature Range | T_J, 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 PC board with 1.3mm² copper pad.

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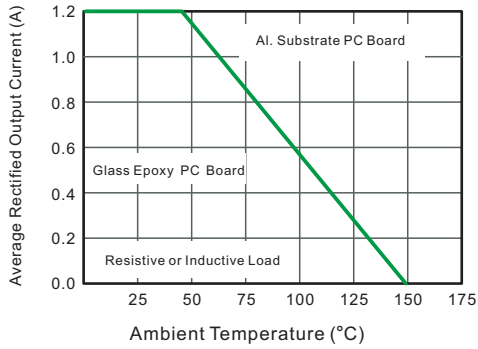


Fig.1 Average Rectified Output Current Derating Curve

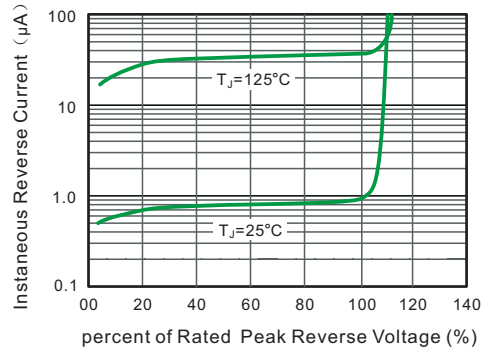


Fig.2 Typical Reverse Characteristics

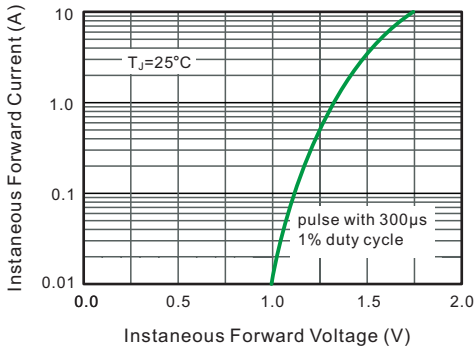


Fig.3 Typical Instantaneous Forward Characteristics

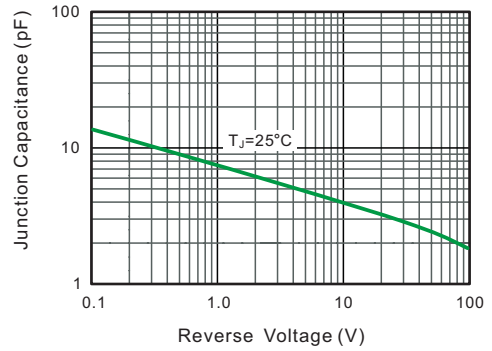


Fig.4 Typical Junction Capacitance

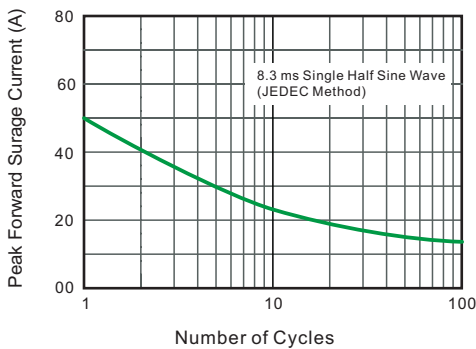
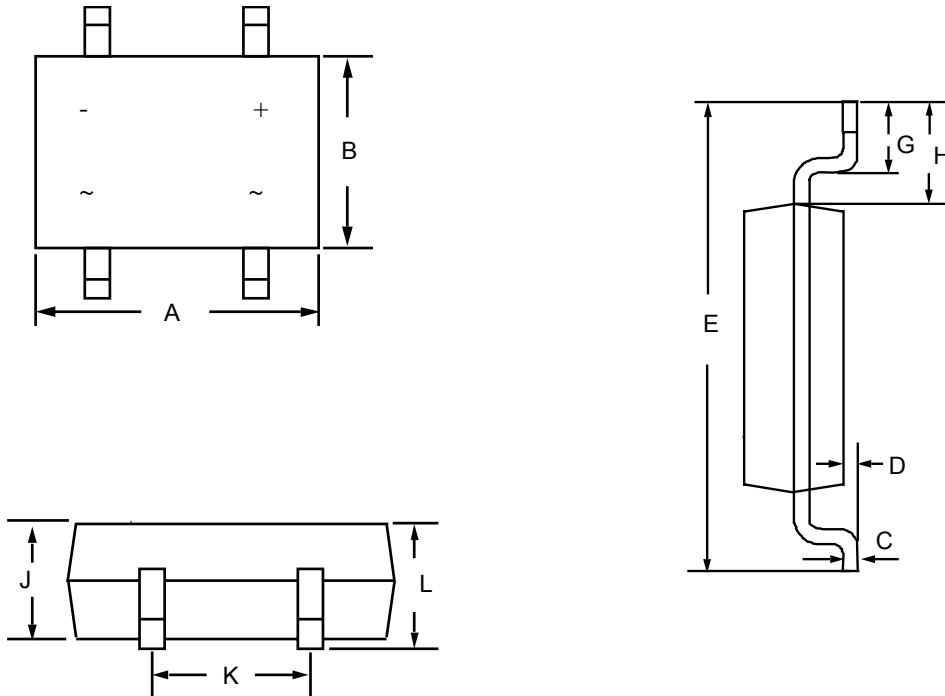


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

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Product dimension (ABS)




| Dimension | Millimeters | |
|-----------|-------------|------|
| | MIN | MAX |
| A | 4.90 | 5.30 |
| B | 4.30 | 4.80 |
| C | 0.15 | 0.25 |
| D | 0.05 | 0.15 |
| E | 6.00 | 6.40 |
| G | 0.30 | 0.80 |
| H | 0.80 | 1.20 |
| J | 1.20 | 1.40 |
| K | 3.80 | 4.20 |
| L | -- | 1.50 |

Ordering information

| Device | Package | Shipping |
|------------------|---------------|--------------------|
| TB1S-15~TB10S-15 | ABS (Pb-Free) | 5000 / Tape & Reel |

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