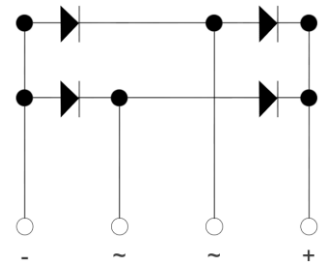


Features

- ◆ Glass Passivated Chip
- ◆ High Surge Current Capability
- ◆ Low Reverse Leakage Current
- ◆ Case to Terminal Isolation Voltage 2500V

Application

- ◆ Coffee Machine
- ◆ Induction Cooker
- ◆ Household Electrical Appliances
- ◆ General Purpose Single-Phase Bridge Rectifier



Machanical Data

- ◆ Case: Plastic Package
- ◆ Marking / Polarity: Marked on Body
- ◆ Weight: About 6.66 Grams

Maximum Ratings and Thermal Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | | Rating | Unit |
|-----------------|---|---------------------------|------------|----------------------|
| V_{RRM} | Recurrent Peak Reverse Voltage | | 1000 | V |
| $I_{F(AV)}$ | Average Forward Output Rectified Current, $T_A = 120^\circ\text{C}$ | | 8.0 | A |
| V_F | Maximum Forward Voltage Per Leg, $I_{FM} = 8.0\text{A}$ | | 1.02 | V |
| I_{FSM} | Peak Forward Surge Current Single Half Sine-wave Superimposed on Rated Load | | 160 | A |
| I_R | Maximum DC Reverse Current at Rated DC Blocking Voltage | $T_A = 25^\circ\text{C}$ | 5.0 | μA |
| | | $T_A = 125^\circ\text{C}$ | 500 | |
| i^2t | Rating for Fusing ($t < 8.3\text{ms}$) | | 106 | A^2S |
| V_{isol} | Rms Isolation Voltage from Case to Leads | | 2500 | V |
| C_J | Typical Junction Capacitance | | 42 | pF |
| $R_{\theta JC}$ | Maximum Thermal Resistance Per Leg | | 4.2 | $^\circ\text{C/W}$ |
| T_J, T_{STG} | Operating Junction and Storage Temperature Range | | -55 to 150 | $^\circ\text{C}$ |

Notes:

- Junction to case with heatsink.
- Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with M3 screw.

■ Characteristic Curve

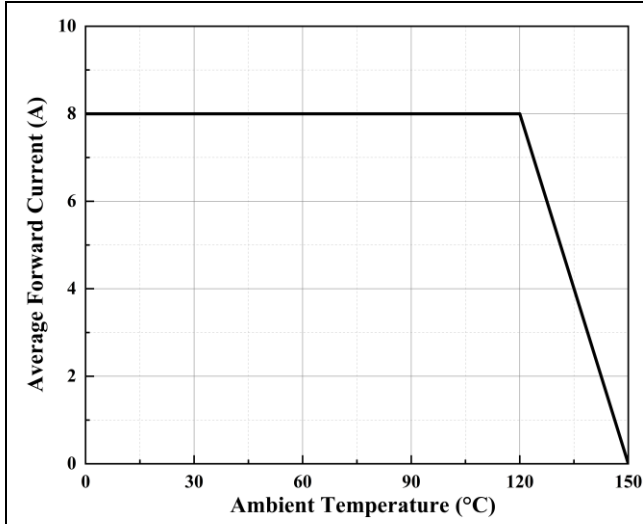


Figure 1. Forward Current Derating Curve

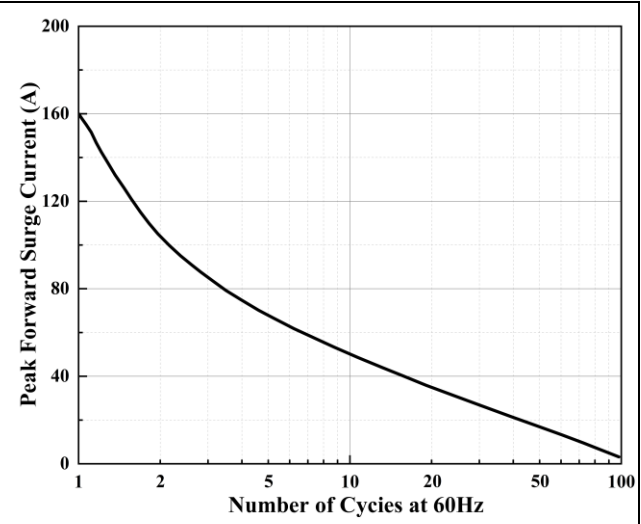


Figure 2. Maximum Non-Repetitive Surge Current

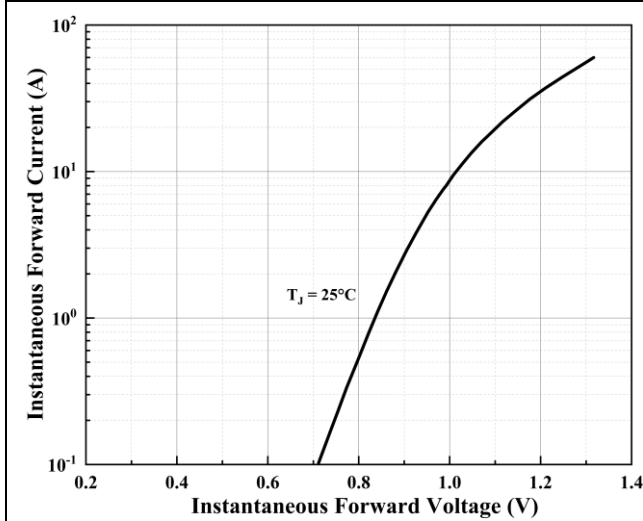


Figure 3. Typical Forward Characteristics Per Diode

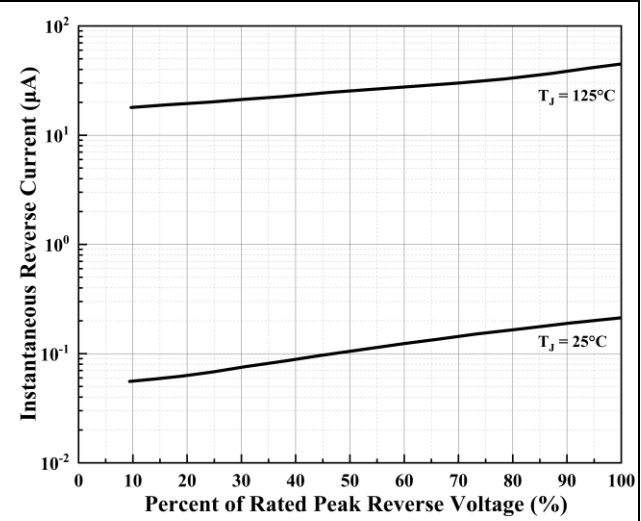
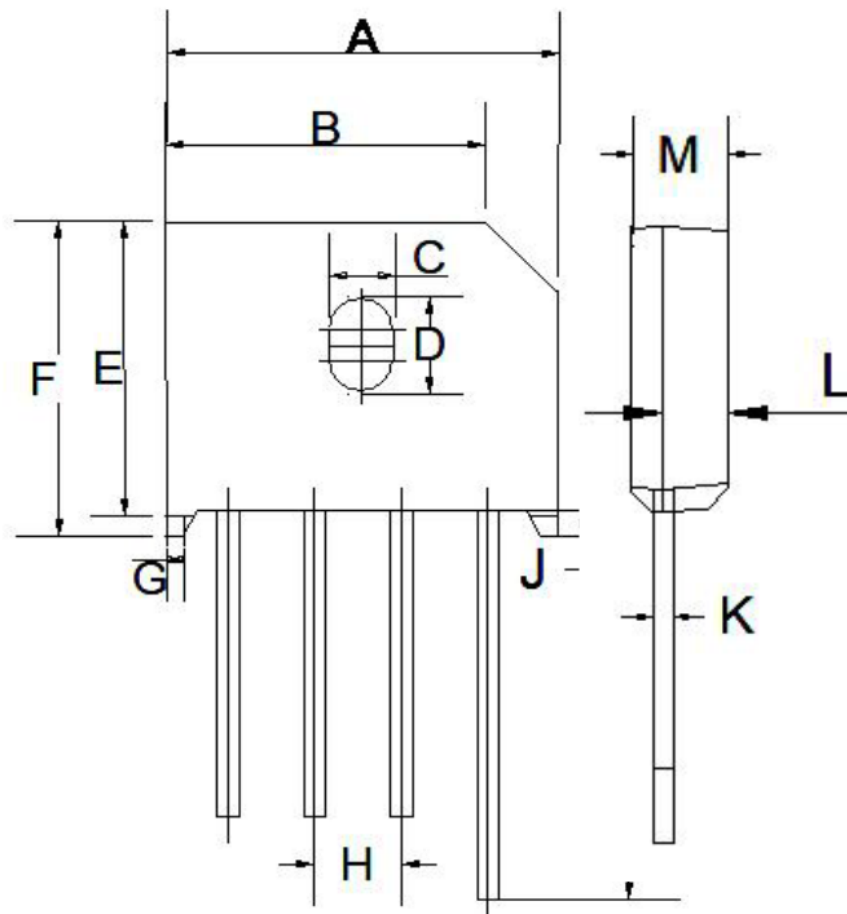


Figure 4. Typical Reverse Leakage Characteristics Per Diode

■ Package Information

KBU Series



| Item | Min (mm) | Max (mm) |
|------|----------|----------|
| A | 22.70 | 23.30 |
| B | 18.00 | 18.60 |
| C | 3.60 | 3.90 |
| D | 5.70 | 5.90 |
| E | 17.20 | 17.80 |
| F | 18.70 | 19.30 |
| G | 0.80 | 1.20 |
| H | 4.90 | 5.40 |
| I | 24.90 | 25.50 |
| J | 1.30 | 1.70 |
| K | 1.20 | 1.30 |
| L | 4.60 | 4.90 |
| M | 6.60 | 6.90 |