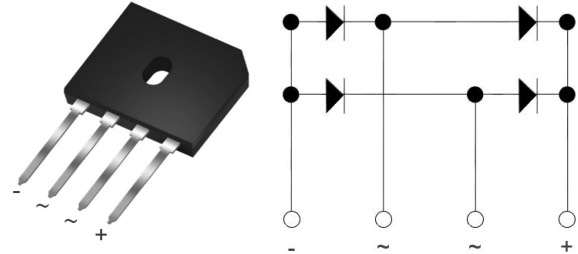


### Features

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

### Application

- ◆ Induction Cooker
- ◆ Switching Mode Power Supply
- ◆ Household Electric Appliances
- ◆ General Purpose Single-Phase Bridge Rectifier



### Machanical Data

- ◆ Case: Plastic Package
- ◆ Marking / Polarity: Marked on Body
- ◆ Weight: About 3.85 Grams

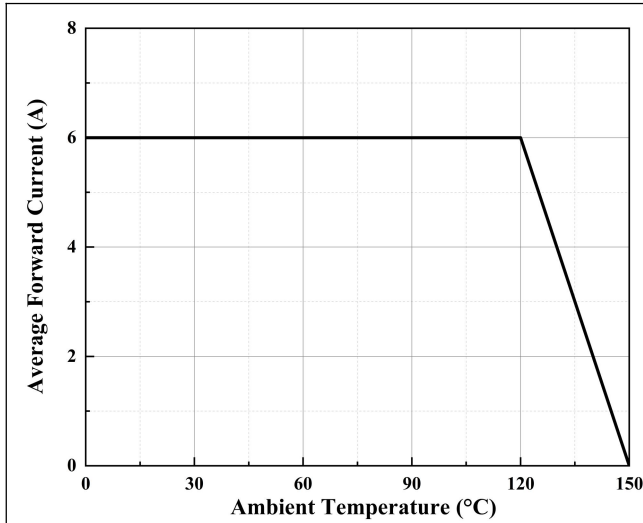
### Maximum Ratings and Thermal Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

| Symbol          | Parameter                                                                   |                           | Rating     | Unit                 |
|-----------------|-----------------------------------------------------------------------------|---------------------------|------------|----------------------|
| $V_{RRM}$       | Recurrent Peak Reverse Voltage                                              |                           | 1000       | V                    |
| $I_{F(AV)}$     | Average Forward Output Rectified Current, $T_A = 120^\circ\text{C}$         |                           | 6.0        | A                    |
| $V_F$           | Forward Voltage Per Leg, $I_{FM} = 6.0\text{A}$                             |                           | 1.03       | 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        | $\mu\text{A}$        |
|                 |                                                                             | $T_A = 125^\circ\text{C}$ | 500        |                      |
| $i^2t$          | Rating for Fusing ( $t < 8.3\text{ms}$ )                                    |                           | 106        | $\text{A}^2\text{S}$ |
| $V_{isol}$      | 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 | $^\circ\text{C}$     |

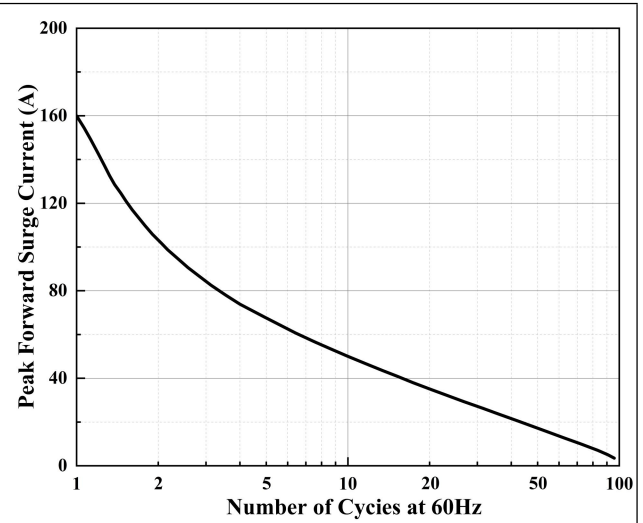
#### Notes:

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

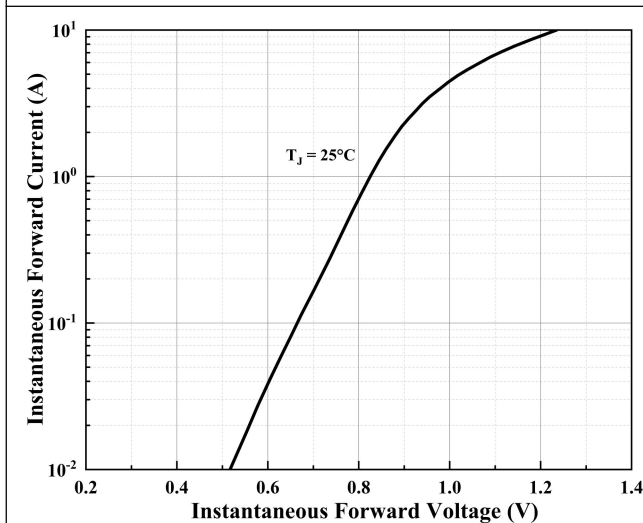
### ■ Characteristic Curve



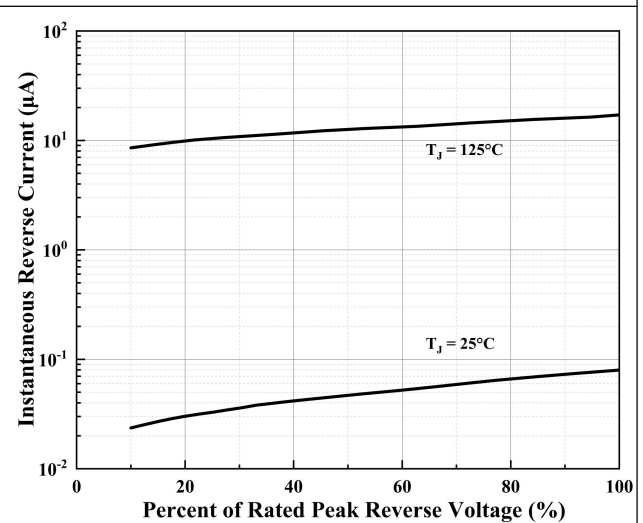
**Figure 1. Forward Current Derating Curve**



**Figure 2. Maximum Non-Repetitive Surge Current**



**Figure 3. Typical Forward Characteristics Per Diode**

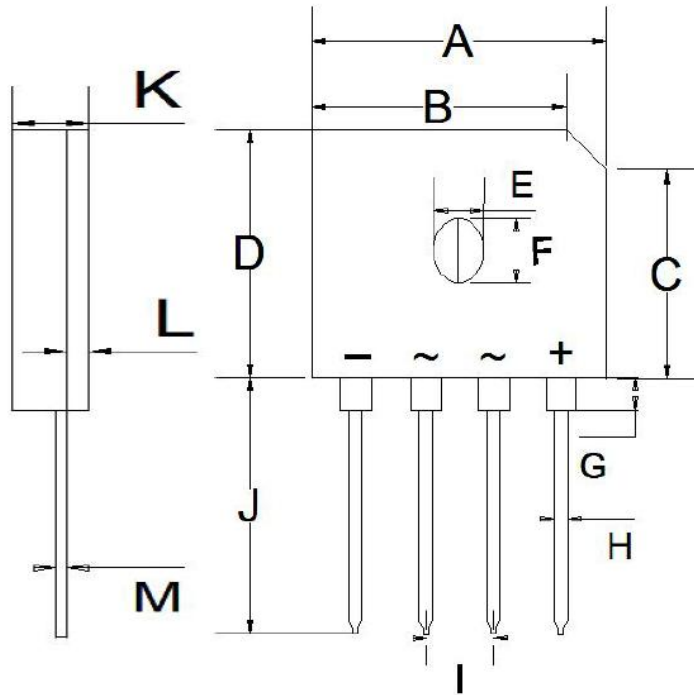


**Figure 4. Typical Reverse Leakage Characteristics Per Diode**

### ■ Package Information

#### Case: GBU Series

Dimensions in millimeters



| 序号 | Min(mm) | MAX(mm) |
|----|---------|---------|
| A  | 21.8    | 22.3    |
| B  | 18.8    | 19.4    |
| C  | 15.2    | 15.7    |
| D  | 18.2    | 18.7    |
| E  | 3.4     | 3.8     |
| F  | 5.4     | 5.8     |
| G  | 2.3     | 2.7     |
| H  | 0.98    | 1.15    |
| I  | 4.8     | 5.2     |
| J  | 17.8    | 18.4    |
| K  | 3.35    | 3.6     |
| L  | 0.95    | 1.05    |
| M  | 0.4     | 0.6     |