

#### ■ Features

- Glass passivated chip
- Low reverse leakage current
- High surge current capability
- Reliable low cost construction utilizing molded plastic technique

#### ■ Applications

- General purpose use in AC/DC bridge full wave rectification

#### ■ Mechanical Data

- Case: GBU
- Polarity symbols being marked on body
- Molding compound meets UL 94V-0 flammability rating
- RoHS-compliant, Solder plated, solderable per MIL-STD-750, Method 2026



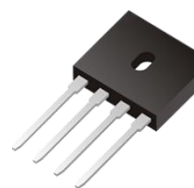
#### Reverse Voltage

50-1000 V

#### Forward Current

10.0 A max

#### Appearance Image



#### ■ Marking

- GBU10xx(005~10)

#### ■ Maximum Ratings @ Ta = 25°C unless otherwise noted

| PARAMETER                                                                          | SYMBOL      | UNIT | GBU10005 | GBU1001 | GBU1002 | GBU1004 | GBU1006 | GBU1008 | GBU1010 |
|------------------------------------------------------------------------------------|-------------|------|----------|---------|---------|---------|---------|---------|---------|
| Repetitive peak reverse voltage                                                    | $V_{RRM}$   | V    | 50       | 100     | 200     | 400     | 600     | 800     | 1000    |
| Maximum RMS voltage                                                                | $V_{RMS}$   | V    | 35       | 70      | 140     | 280     | 420     | 560     | 700     |
| Maximum DC blocking Voltage                                                        | $V_{DC}$    | V    | 50       | 100     | 200     | 400     | 600     | 800     | 1000    |
| Maximum average output current@60Hz sine wave, resistance load                     | $I_{F(AV)}$ | A    | 10.0     |         |         |         |         |         |         |
| Peak forward surge current 8.3 ms single half sine wave superimposed on rated load | $I_{FSM}$   | A    | 200      |         |         |         |         |         |         |
| Peak forward surge current 1.0 ms single half sine wave superimposed on rated load |             | A    | 400      |         |         |         |         |         |         |
| Current squared time<br>@1ms≤t<8.3ms Tj=25°C, Rating of per diode                  | $I^2t$      | A²S  | 166.00   |         |         |         |         |         |         |
| Storage temperature                                                                | $T_{stg}$   | °C   | -55~+150 |         |         |         |         |         |         |
| Junction temperature                                                               | $T_j$       | °C   | -55~+150 |         |         |         |         |         |         |

#### ■ Electrical Characteristics @ Ta = 25°C unless otherwise noted

| PARAMETER                                               | TEST CONDITIONS         | SYMBOL | UNIT | GBU10005 | GBU1001 | GBU1002 | GBU1004 | GBU1006 | GBU1008 | GBU1010 |
|---------------------------------------------------------|-------------------------|--------|------|----------|---------|---------|---------|---------|---------|---------|
| Maximum instantaneous forward voltage                   | $I_F=5.0A$              | $V_F$  | V    | 1.0      |         |         |         |         |         |         |
| Maximum DC reverse current at rated DC blocking voltage | $V_R=V_{DC}$ , Tj=25°C  | $I_R$  | μA   | 5        |         |         |         |         |         |         |
|                                                         | $V_R=V_{DC}$ , Tj=100°C | $I_R$  |      | 500      |         |         |         |         |         |         |

■ Characteristic Curve (Typical)

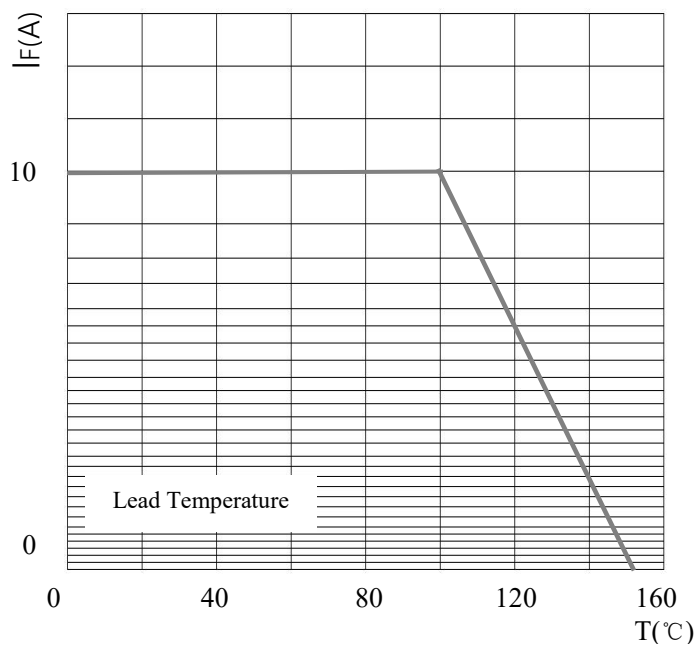


FIG1. Derating Curve For Output Rectified Current

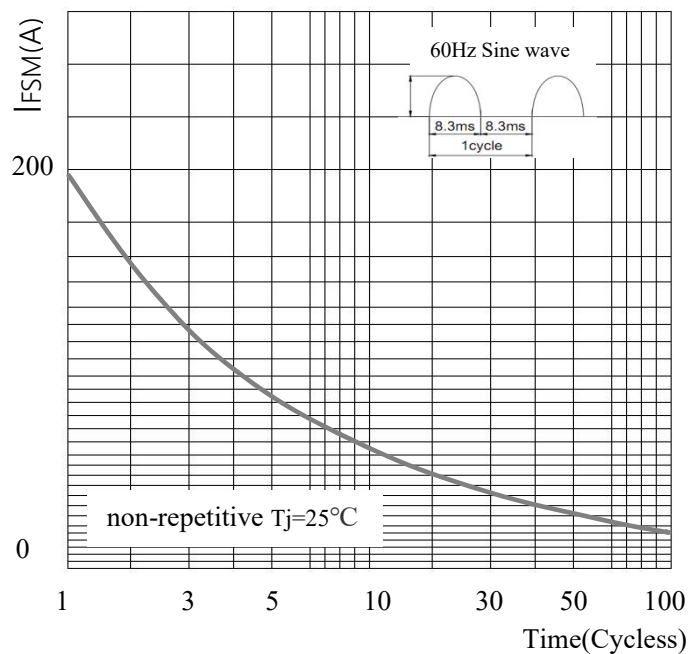


FIG2. Surge Forward Current Capability

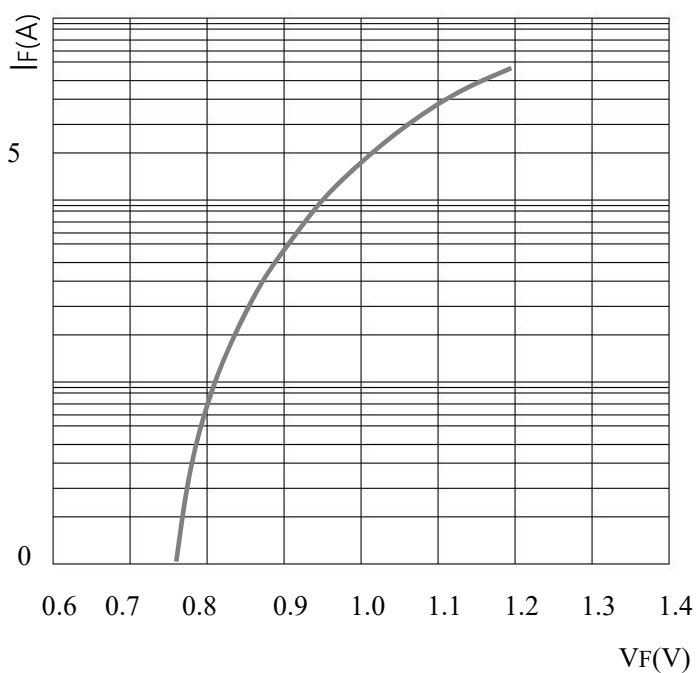


FIG3. Typical Forward Characteristics

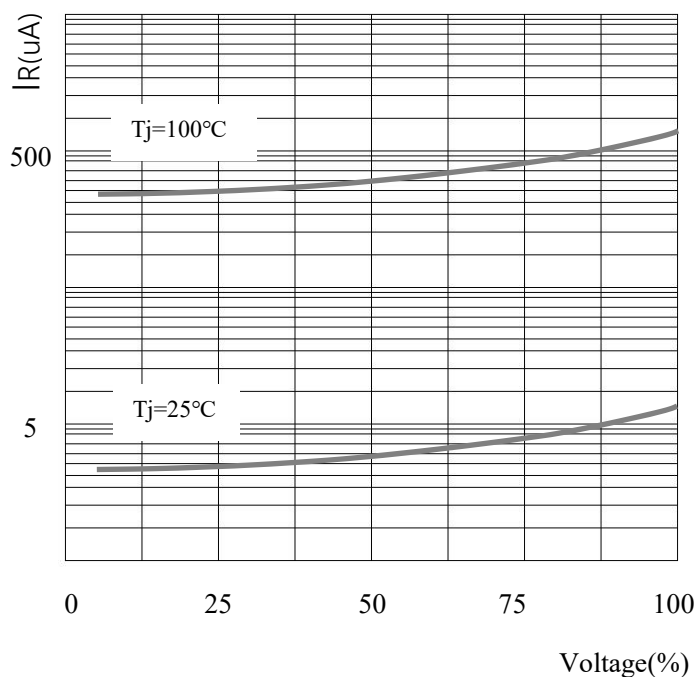
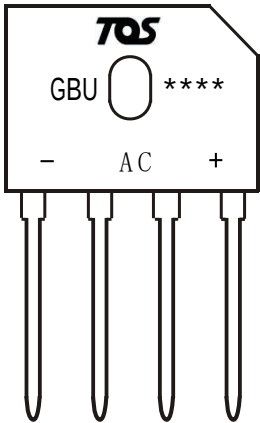


FIG4. Typical Reverse Characteristics

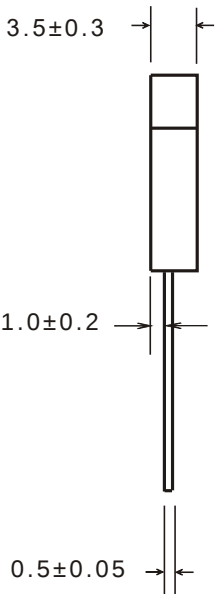
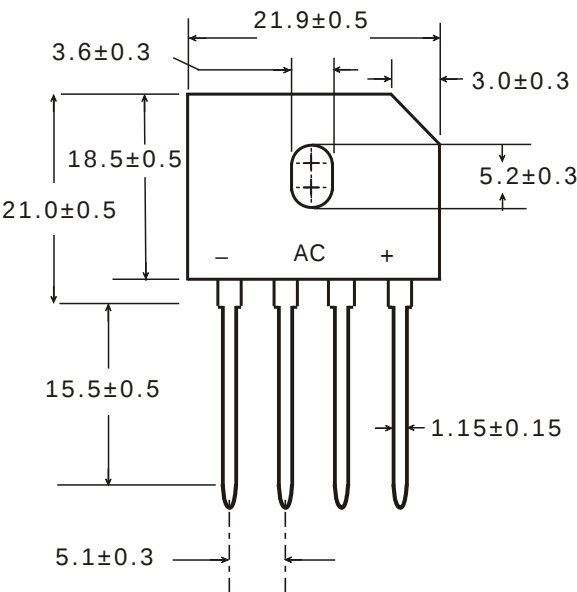
■ Marking and packet information



GBU\*\*\*\* : Marking Model      **TQS** : Brand Logo

| Packaging information |         |
|-----------------------|---------|
| 每盒                    | 500PCS  |
| 每箱                    | 5000PCS |
| 脚长定制                  | 支持      |

■ GBU Package outline dimensions



Dimensions in millimeters

■ Notice

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