

## ■ Features

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

## ■ Mechanical Data

- Case: SGBJ
- 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



## ■ Marking

- SGBJ25xx(08~16)

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

| PARAMETER                                                                          | SYMBOL      | UNIT             | SGBJ2508 | SGBJ2510 | SGBJ2512 | SGBJ2514 | SGBJ2516 |
|------------------------------------------------------------------------------------|-------------|------------------|----------|----------|----------|----------|----------|
| Repetitive peak reverse voltage                                                    | $V_{RRM}$   | V                | 800      | 1000     | 1200     | 1400     | 1600     |
| Maximum RMS voltage                                                                | $V_{RMS}$   | V                | 560      | 700      | 840      | 980      | 1120     |
| Maximum DC blocking Voltage                                                        | $V_{DC}$    | V                | 800      | 1000     | 1200     | 1400     | 1600     |
| Maximum average output current@60Hz sine wave, resistance load                     | $I_{F(AV)}$ | A                | 25.0     |          |          |          |          |
| Peak forward surge current 8.3 ms single half sine wave superimposed on rated load | $I_{FSM}$   | A                | 450      |          |          |          |          |
| Peak forward surge current 1.0 ms single half sine wave superimposed on rated load |             | A                | 900      |          |          |          |          |
| Current squared time<br>@1ms≤t<8.3ms Tj=25°C, Rating of per diode                  | $I^2t$      | A <sup>2</sup> S | 840.38   |          |          |          |          |
| Isolation Breakdown Voltage AC 50Hz/60Hz; R.M.S;<br>1min                           | $V_{ISO}$   | V                | 2500     |          |          |          |          |
| Mounting Torque (Recommended torque:0.65 N·m)                                      | Ms          | N.m              | 0.8      |          |          |          |          |
| Storage temperature                                                                | $T_{stg}$   | °C               | -55~+150 |          |          |          |          |
| Junction temperature                                                               | $T_j$       | °C               | -55~+150 |          |          |          |          |

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

| PARAMETER                                               | TEST CONDITIONS         | SYMBOL | UNIT | SGBJ2508 | SGBJ2510 | SGBJ2512 | SGBJ2514 | SGBJ2516 |
|---------------------------------------------------------|-------------------------|--------|------|----------|----------|----------|----------|----------|
| Maximum instantaneous forward voltage                   | $I_F=12.5A$             | $V_F$  | V    | 1.1      |          |          |          |          |
| 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      |          |          |          |          |

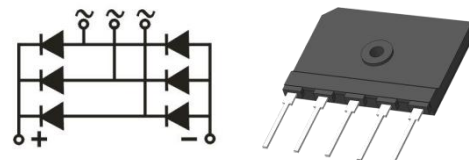
Reverse Voltage

800-1600 V

Forward Current

25.0 A max

## Appearance Image



■ Characteristic Curve (Typical)

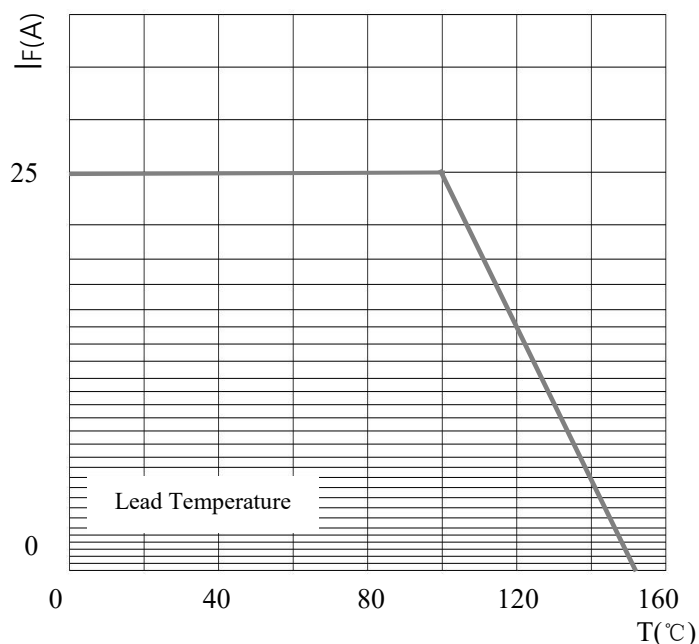


FIG1. Derating Curve For Output Rectified Current

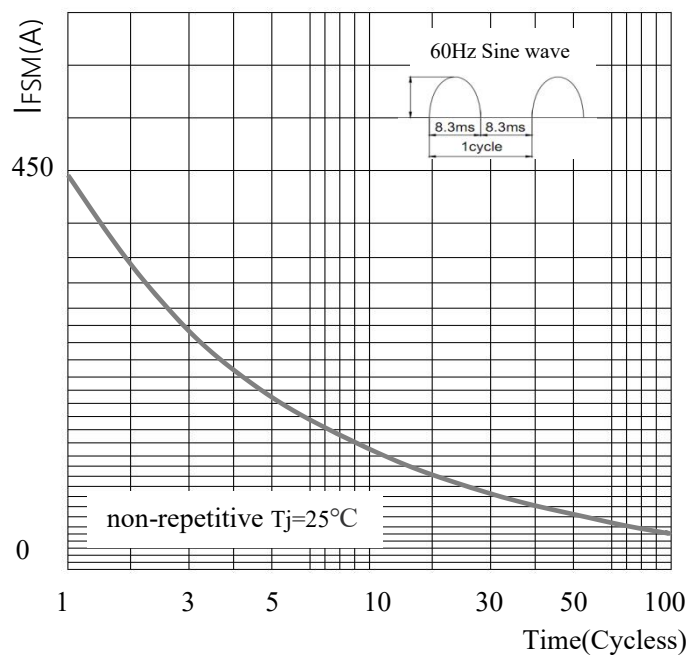


FIG2. Surge Forward Current Capability

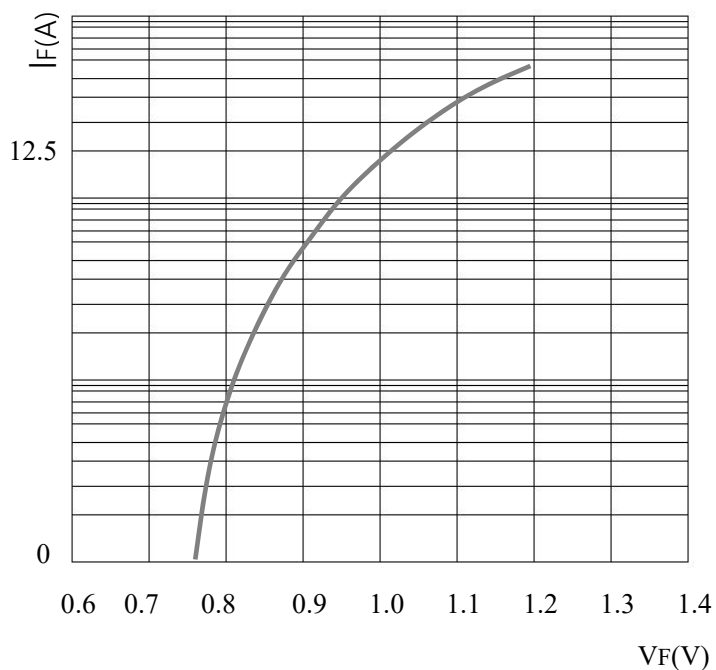


FIG3. Typical Forward Characteristics

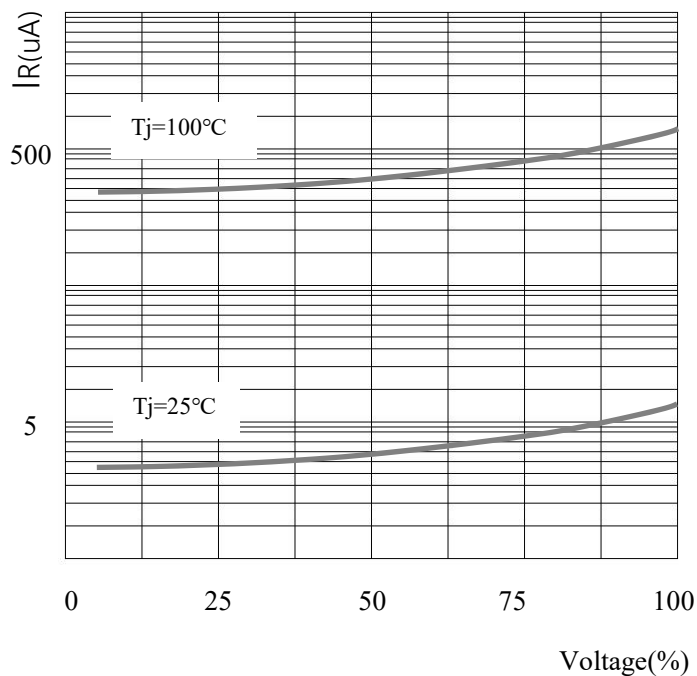
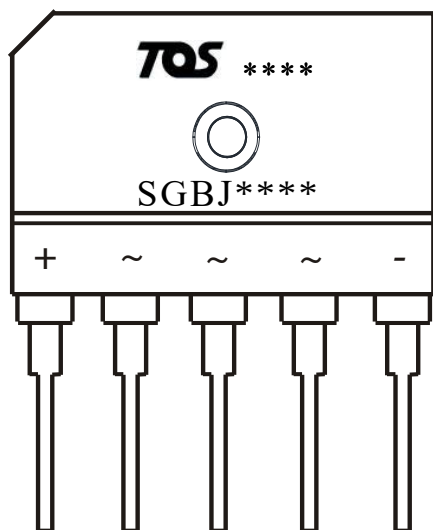


FIG4. Typical Reverse Characteristics

### ■ Marking and packet information

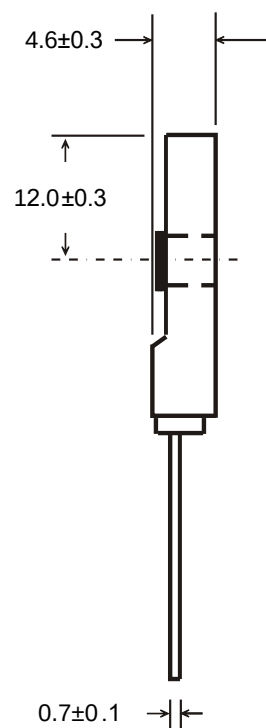
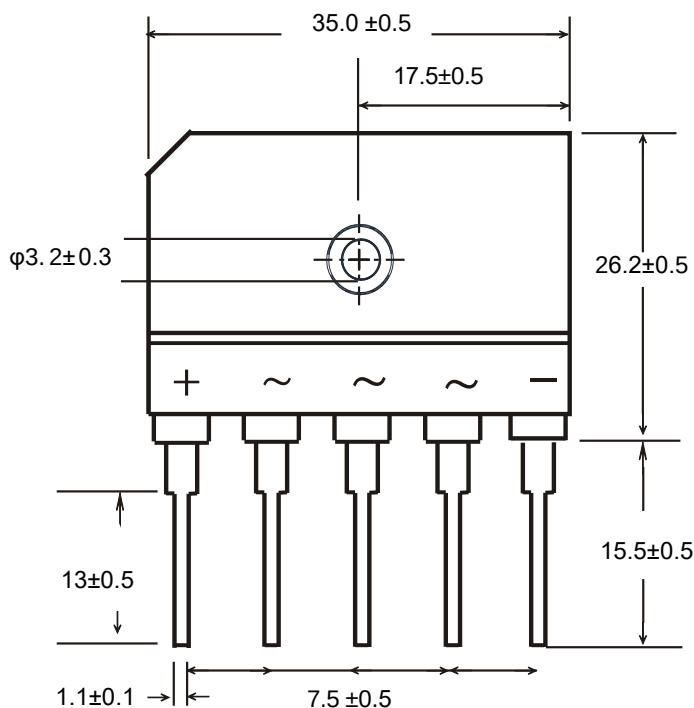


SGBJ\*\*\*\* : Marking Model

**TOS** : Brand Logo

| Packaging information |         |
|-----------------------|---------|
| 每盒                    | 200PCS  |
| 每箱                    | 1200PCS |
| 脚长定制                  | 支持      |

### ■ SGBJ Package outline dimensions



Dimensions in millimeters

### ■ Notice

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