

# Silicon General Purpose Bridge Rectifier



## B05S-G thru B10S-G

### Glass Passivated Type

Reverse Voltage: 50 ~ 1000 Volts

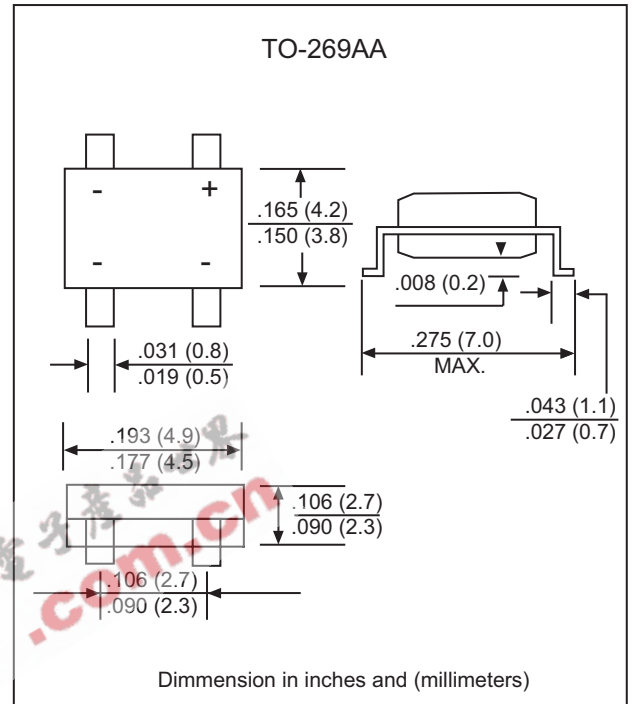
Forward Current: 0.5 Amp

#### Features:

- Ideal for surface mount applications
- Easy pick and place
- Plastic package has Underwriters Lab. Flammability classification 94V-0
- Built-in strain relief
- Glass passivated junction

#### Mechanical Data:

- Case: JEDEC DO-269AA molded plastic
- Terminals: solderable per MIL-STD-750, Method 2026
- Polarity: Marked on body
- Mounting position: Any
- Approx. Weight: 0.22gram



### Maximum Ratings and Electrical Characteristics

| Parameter  | Symbol          | B05S-G      | B1S-G | B2S-G | B4S-G | B6S-G | B8S-G | B10S-G | Unit          |
|--|-----------------|-------------|-------|-------|-------|-------|-------|--------|---------------|
| Max. Repetitive Peak Reverse Voltage   | $V_{RRM}$       | 50          | 100   | 200   | 400   | 600   | 800   | 1000   | V             |
| Max. DC Blocking Voltage   | $V_{DC}$        | 50          | 100   | 200   | 400   | 600   | 800   | 1000   | V             |
| Max. RMS Voltage   | $V_{RMS}$       | 35          | 70    | 140   | 280   | 420   | 560   | 700    | V             |
| Peak Surge Forward Current<br>8.3ms single half sine-wave<br>superimposed on rate load<br>(JEDEC method) | $I_{FSM}$       | 30          |       |       |       |       |       |        | A             |
| Max. Average Forward Current   | $I_o$           | 0.5         |       |       |       |       |       |        | A             |
| Max. Instantaneous Forward Current<br>at 0.5A  | $V_F$           | 1.0         |       |       |       |       |       |        | V             |
| Max. DC Reverse Current at Rated DC<br>Blocking Voltage<br>$T_a=25^{\circ}C$<br>$T_a=125^{\circ}C$       | $I_R$           | 5<br>500    |       |       |       |       |       |        | $\mu A$       |
| Max. Thermal Resistance (Note 1)   | $R_{\theta JA}$ | 85          |       |       |       |       |       |        | $^{\circ}C/W$ |
| Operating Junction Temperature   | $T_j$           | -55 to +150 |       |       |       |       |       |        | $^{\circ}C$   |
| Storage Temperature  | $T_{STG}$       | -55 to +150 |       |       |       |       |       |        | $^{\circ}C$   |

Note1: Thermal resistance from junction to ambient.

"-G" suffix designated RoHS compliant version

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### Rating and Characteristic Curves (B05S-G thru B10S-G)

Fig. 1 - Reverse Characteristics

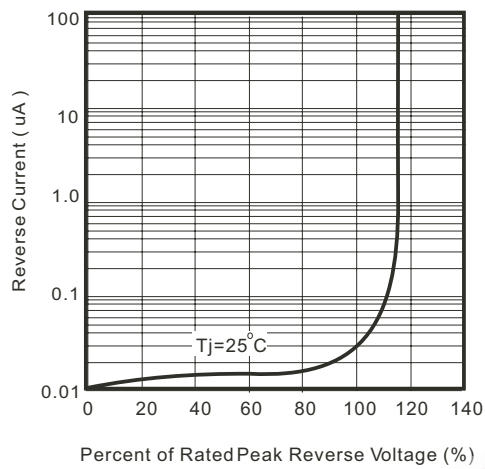


Fig.2 - Forward Characteristics

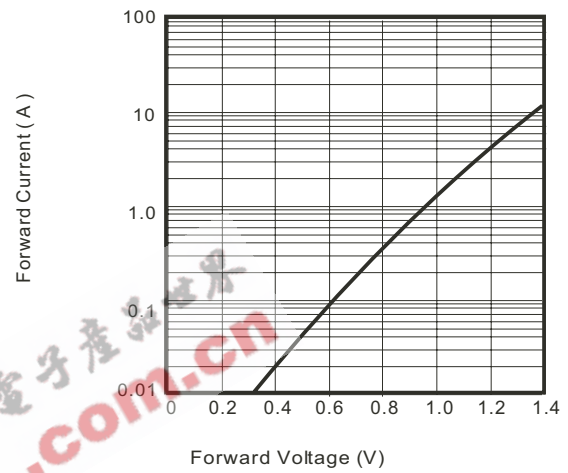


Fig. 3 - Non Repetitive Forward Surge Current

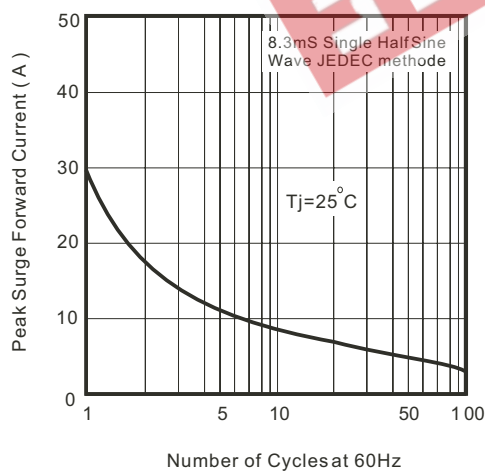


Fig. 4 - Current Derating Curve

