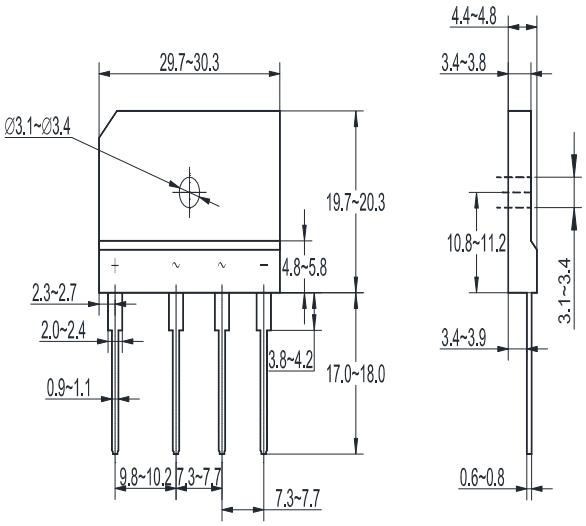
# GBJ25A THRU GBJ25M-HAF

## Glass Passivated Single Phase Bridge Rectifiers
## Reverse Voltage - 50 to 1000 V
## Forward Current - 25 A

GBJ




Dimensions in inches and (millimeters)

### Features

- Thin Single In-Line package
- Ideal for printed circuit boards
- Glass passivated chip junction
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Halogen and Antimony Free(HAF), RoHS compliant

### Mechanical Data

- Case: GBJ
- Terminals: Plated leads solderable per MIL-STD-750 Method 2026
- Polarity: As marked on body

### Maximum Ratings and Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

| Parameter | Symbols | GBJ25A | GBJ25B | GBJ25D | GBJ25G | GBJ25J | GBJ25K | GBJ25M | Units |
|---|---|---|---|---|---|---|---|---|---|
| Maximum Repetitive Peak Reverse Voltage | $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Output Current at $T_C$ = 98 °C | $I_{F(AV)}$ | 25 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | $I_{FSM}$ | 350 | | | | | | | A |
| Maximum Forward Voltage per Leg at 12.5 A | $V_F$ | 1 | | | | | | | V |
| Maximum DC Reverse Current $T_A$ = 25 °C<br>at Rated DC Blocking Voltage $T_A$ = 125 °C | $I_R$ | 5<br>250 | | | | | | | μA |
| Operating Junction and Storage Temperature Range | $T_j$ , $T_{stg}$ | - 55 to + 150 | | | | | | | °C |

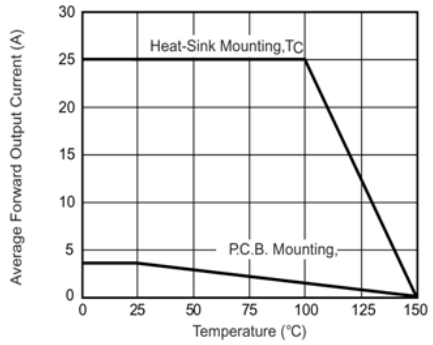



Figure 1. Derating Curve Output Rectified Current

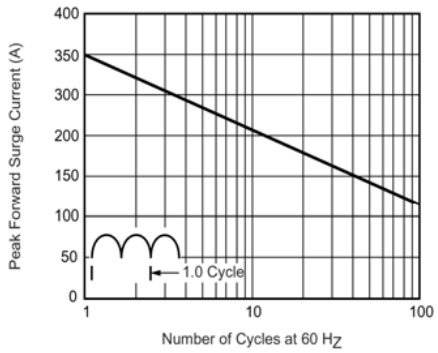



Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

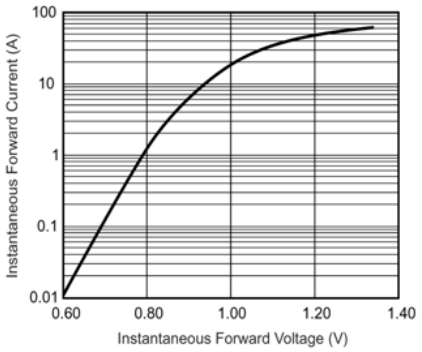



Figure 3. Typical Forward Characteristics Per Leg

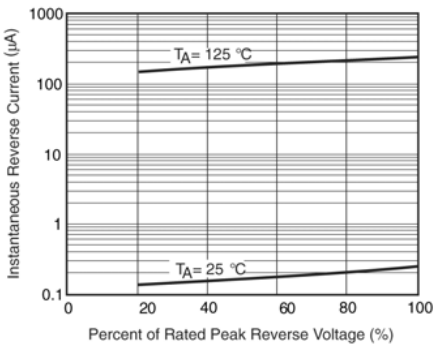



Figure 4. Typical Reverse Characteristics Per Leg

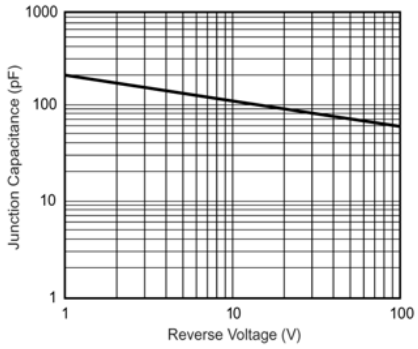



Figure 5. Typical Junction Capacitance Per Leg

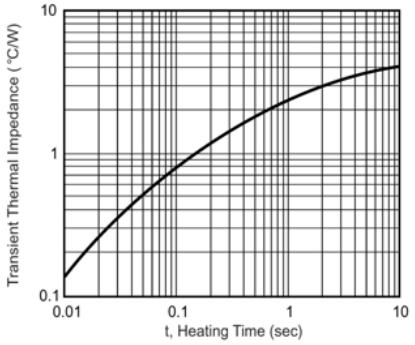



Figure 6. Typical Transient Thermal Impedance