# GBJ2500 THRU GBJ2510

## BRIDGE RECTIFIERS

***Reverse Voltage** - 50 to 1000 Volts **Forward Current** - 25.0 Amperes*

### FEATURES

Glass passivated chip junctions

Low reverse current operation

High Junction Temperature

High Forward Surge Capability

Lead free in compliance with EU RoHS

2011/65/EU directive

### MECHANICAL DATA

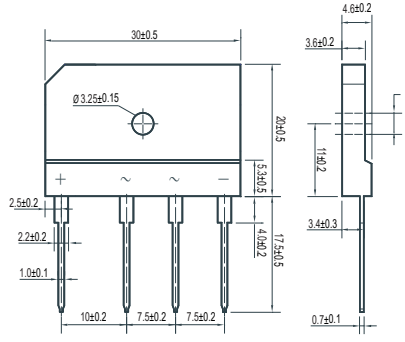
Package:6GBJ/6KBJ

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant

Terminals:Tin plated leads, solderableper J-STD-002 and JESD22-B102

Polarity: As marked on body

**GBJ**




Dimensions in millimeters

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

| Characteristics | Symbol | GBJ 2500 | GBJ 2501 | GBJ 2502 | GBJ 2504 | GBJ 2506 | GBJ 2508 | GBJ 2510 | Unit |
|---|---|---|---|---|---|---|---|---|---|
| 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 Current @$T_A$=50 ℃ (Note1) | $I_{(AV)}$ | 25.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) | $I_{FSM}$ | 300 | | | | | | | A |
| $I^2t$ Rating for Fusing (t<8.3mS) | $I^2t$ | 370 | | | | | | | $A^2s$ |
| Peak Forward Voltage per Diode at 12.5A DC | $V_F$ | 1.1 | | | | | | | V |
| Maximum DC Reverse Current at Rated @$T_J$=25℃<br>DC Blocking Voltage per Diode @$T_J$=100℃ | $I_R$ | 5.0<br>500 | | | | | | | μA |
| Operating Junction Temperature Range | $T_J$ | -55 to +150 | | | | | | | ℃ |
| Storage Temperature Range | $T_{STG}$ | -55 to +150 | | | | | | | ℃ |

Note: Mounting conditions,0.5″ lead length maximum.

FIG. 1- FORWARD CURRENT DERATING CURVE

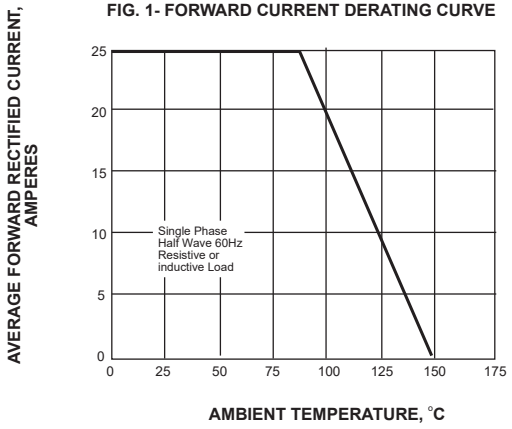



FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

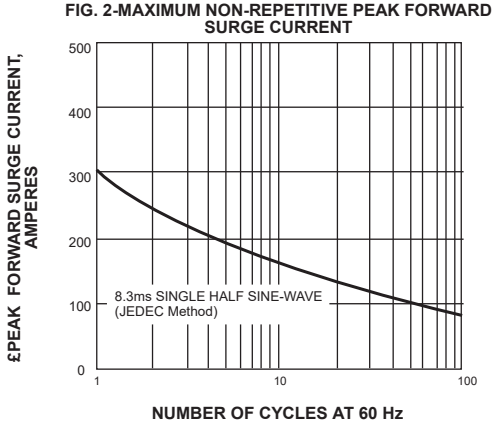



FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

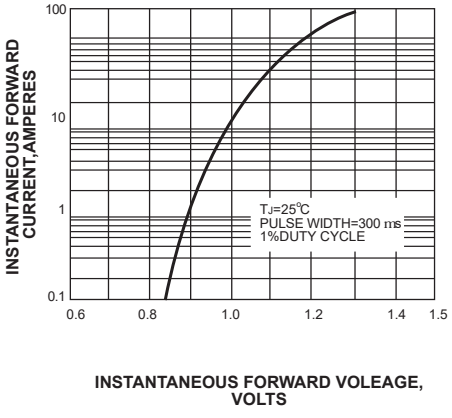



FIG. 4-TYPICAL REVERSE CHARACTERISTICS