

30±0.5

Ø 3.25±0.15

10+0 3

2.5±0.2

<u>2.2±0.2</u> 1.0±0.1 GBJ

4.6±0.2

3.6±0.2

11±0.3

3.4±0.3

0.7±0.1

20±0.

5.3±0.

17.5±0.5 4.0±0.2

# **GBJ2500 TO GBJ2510**

## **BRIDGE RECTIFIERS**

Reverse Voltage - 50 to 1000 Volts Forward Current - 25.0 Ampers

#### **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

#### Dimensions in millimeters

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| Characteristics   | Symbol | GBJ<br>2500 | GBJ<br>2501 | GBJ<br>2502 | GBJ<br>2504 | GBJ<br>2506 | GBJ<br>2508 | GBJ<br>2510 | Unit |
|---|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------|
| Maximum Repetitive Peak Reverse Voltage   | VRRM   | 50          | 100         | 200         | 400         | 600         | 800         | 1000        | V    |
| Maximum RMS Voltage   | VRMS   | 35          | 70          | 140         | 280         | 420         | 560         | 700         | V    |
| Maximum DC Blocking Voltage   | VDC    | 50          | 100         | 200         | 400         | 600         | 800         | 1000        | V    |
| Maximum Average Forward Rectified Current @Ta=50 $^\circ\mathbb{C}$ (Note1)                           | l(AV)  | 25.0        |             |             |             |             |             |             | А    |
| Peak Forward Surge Current, 8.3mS Single Half Sine-Wave,<br>Superimposed on Rated Load (JEDEC Method) | Ігѕм   | 250         |             |             |             |             |             | А           |      |
| Peak Forward Voltage per Diode at 12.5A DC  | VF     | 1.1         |             |             |             |             |             |             | v    |
| Maximum DC Reverse Current at Rated @Tj=25°C<br>DC Blocking Voltage per Diode @Tj=100°C               | IR     | 5.0<br>500  |             |             |             |             |             |             | μA   |
| Operating Junction Temperature Range  | TJ     | -55 to +150 |             |             |             |             |             |             | °C   |
| Storage Temperature Range   | Tstg   | -55 to +150 |             |             |             |             |             |             | °C   |
| Note: Mounting conditions 0 F" load longth maximum  |        |             |             |             |             |             |             |             |      |

Note: Mounting conditions,0.5" lead length maximum.





AMBIENT TEMPERATURE, °C





INSTANTANEOUS FORWARD VOLEAGE, VOLTS

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

FIG. 4-TYPICAL REVERSE CHARACTERISTICS







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