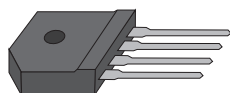


# GBJ1001 THRU GBJ1007

SINGLE PHASE 10.0 AMP BRIDGE RECTIFIERS



## FEATURES

- \* Ideal for printed circuit board
- \* Low forward voltage
- \* Low leakage current
- \* Mounting position: Any

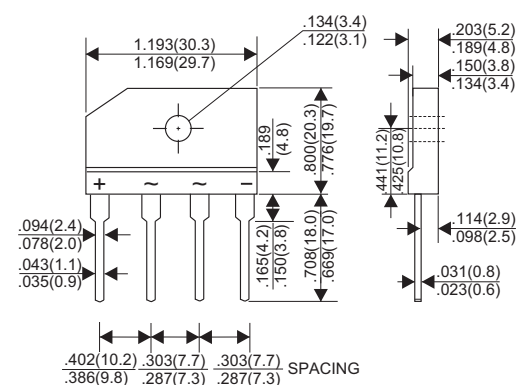
## VOLTAGE RANGE

50 to 1000 Volts

## CURRENT

10.0 Amperes

## GBJ



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| TYPE NUMBER  | GBJ1001    | GBJ1002 | GBJ1003 | GBJ1004 | GBJ1005 | GBJ1006 | GBJ1007 | UNITS |
|--|------------|---------|---------|---------|---------|---------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage   | 50         | 100     | 200     | 400     | 600     | 800     | 1000    | V     |
| Maximum RMS Voltage  | 35         | 70      | 140     | 280     | 420     | 560     | 700     | V     |
| Maximum DC Blocking Voltage  | 50         | 100     | 200     | 400     | 600     | 800     | 1000    | V     |
| Maximum Average Forward (with heatsink Note 2)   | 10.0       |         |         |         |         |         |         | A     |
| Rectified Current at Tc=110°C (Without heatsink)   | 3.0        |         |         |         |         |         |         | A     |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 170        |         |         |         |         |         |         | A     |
| Maximum Forward Voltage Drop per Bridge Element at 5.0A D.C.                                       | 1.05       |         |         |         |         |         |         | V     |
| Maximum DC Reverse Current Ta=25°C   | 5.0        |         |         |         |         |         |         | μA    |
| at Rated DC Blocking Voltage Ta=100°C  | 500        |         |         |         |         |         |         | μA    |
| Typical Thermal Resistance R <sub>jc</sub> (Note 1)  | 2.3        |         |         |         |         |         |         | °C/W  |
| Typical Thermal Resistance R <sub>jl</sub> (Note 2)  | 6.0        |         |         |         |         |         |         | °C/W  |
| Operating Temperature Range, T <sub>j</sub>  | -55 — +150 |         |         |         |         |         |         | °C    |
| Storage Temperature Range, T <sub>stg</sub>  | -55 — +150 |         |         |         |         |         |         | °C    |

### NOTES:

1. Thermal Resistance from Junction to Case with device mounted on 100mm x 100mm x 1.6mm Cu Plate Heatsink.
2. Thermal Resistance from Junction to Lead without Heatsink.

RATING AND CHARACTERISTIC CURVES (GBJ1001 THRU GBJ1007)

FIG.1-TYPICAL FORWARD CURRENT  
DERATING CURVE

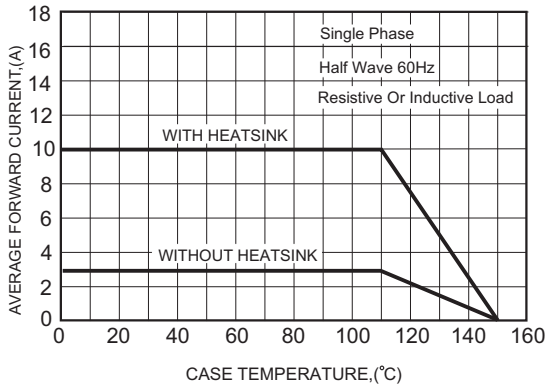


FIG.2-MAXIMUM NON-REPETITIVE FORWARD  
SURGE CURRENT

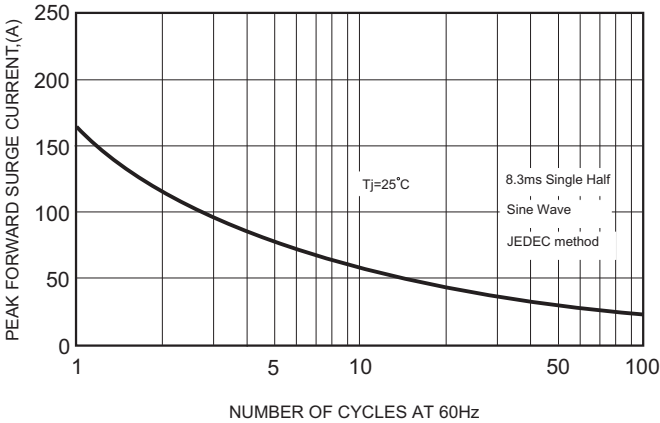


FIG.3-TYPICAL FORWARD  
CHARACTERISTICS

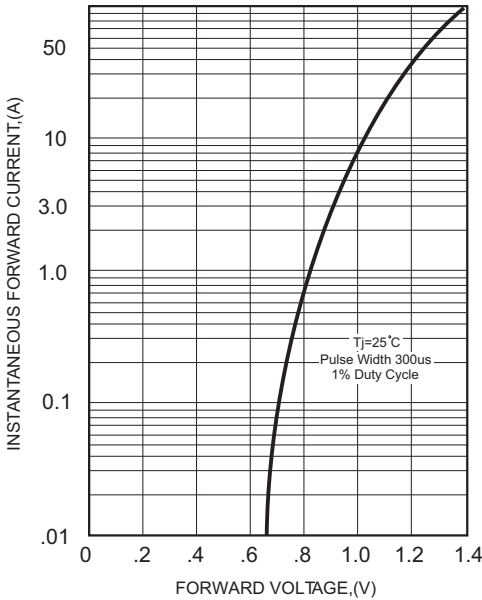


FIG.4-TYPICAL REVERSE  
CHARACTERISTICS

