

# GBJ35005 THRU GBJ3510

## SINGLE PHASE 35 AMP BRIDGE RECTIFIERS



### FEATURES

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

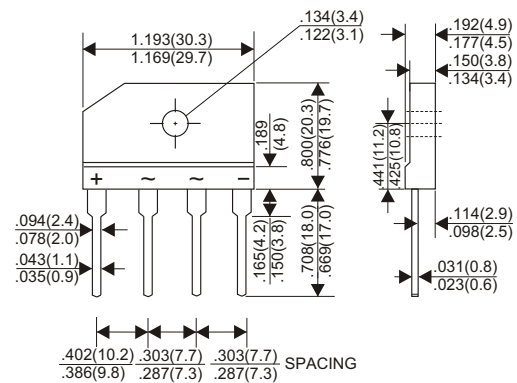
### VOLTAGE RANGE

50 to 1000 Volts

### CURRENT

35.0 Amperes

### GBJ



## 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  | GBJ35005 | GBJ3501 | GBJ3502 | GBJ3504 | GBJ3506 | GBJ3508 | GBJ3510 | 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)   |          |         |         |         |         |         |         | 35.0       | A    |
| .375"(9.5mm) Lead Length at Tc=100°C (With heatsink)   |          |         |         |         |         |         |         | 4.2        | A    |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) |          |         |         |         |         |         |         | 350        | A    |
| Maximum Forward Voltage Drop per Bridge Element at 17.5A D.C.                                      |          |         |         |         |         |         |         | 1.05       | V    |
| Maximum DC Reverse Current Ta=25°C   |          |         |         |         |         |         |         | 10         | A    |
| at Rated DC Blocking Voltage Ta=125°C  |          |         |         |         |         |         |         | 500        | A    |
| Typical Junction Capacitance (Note 1)  |          |         |         |         |         |         |         | 85         | PF   |
| Typical Thermal Resistance R <sub>jc</sub> (Note 2)  |          |         |         |         |         |         |         | 0.6        | °C/W |
| Operating Temperature Range, T <sub>J</sub>  |          |         |         |         |         |         |         | -55 — +150 | °C   |
| Storage Temperature Range, T <sub>STG</sub>  |          |         |         |         |         |         |         | -55 — +150 | °C   |

#### NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal Resistance from Junction to Case with device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

## RATING AND CHARACTERISTIC CURVES (GBJ35005 THRU GBJ3510)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

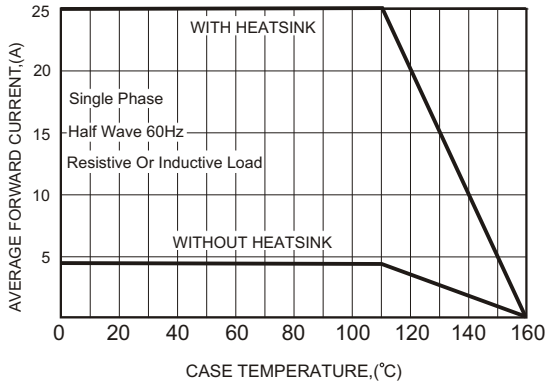


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

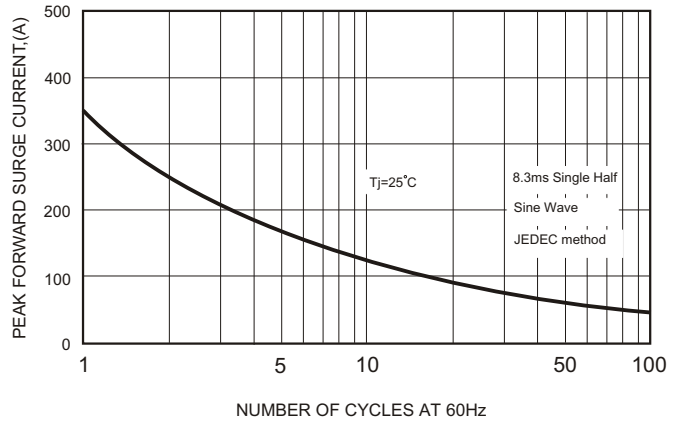


FIG.3-TYPICAL FORWARD CHARACTERISTICS

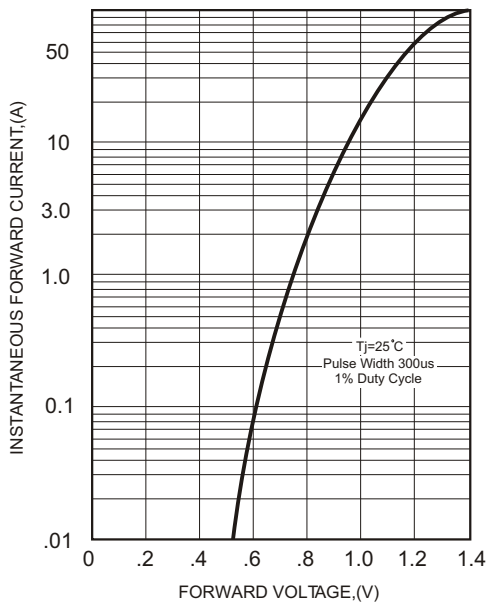


FIG.4-TYPICAL REVERSE CHARACTERISTICS

