

GBJ1501 THRU GBJ1507



SINGLE PHASE 15.0 AMP BRIDGE RECTIFIERS



FEATURES

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

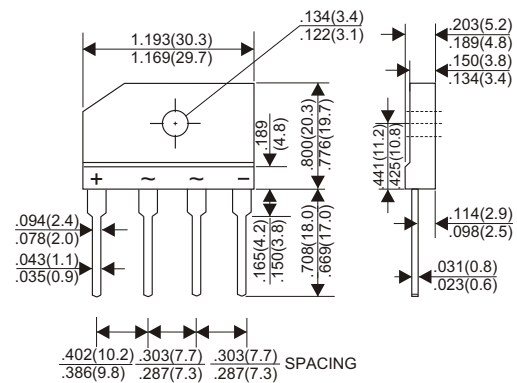
VOLTAGE RANGE

50 to 1000 Volts

CURRENT

15.0 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 | GBJ1501 | GBJ1502 | GBJ1503 | GBJ1504 | GBJ1505 | GBJ1506 | GBJ1507 | 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 Current @Tc=100°C | 15.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 240 | | | | | | | A |
| Maximum Forward Voltage Drop per Bridge Element at 7.5A D.C. | 1.05 | | | | | | | V |
| Maximum DC Reverse Current Ta=25°C | 10 | | | | | | | μA |
| at Rated DC Blocking Voltage Ta=125°C | 500 | | | | | | | μA |
| Typical Junction Capacitance (Note 1) | 60 | | | | | | | PF |
| Typical Thermal Resistance R _{jc} (Note 2) | 0.8 | | | | | | | °C/W |
| Operating Temperature Range, T _J | -55 — +150 | | | | | | | °C |
| Storage Temperature Range, T _{stg} | -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 (GBJ1501 THRU GBJ1507)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

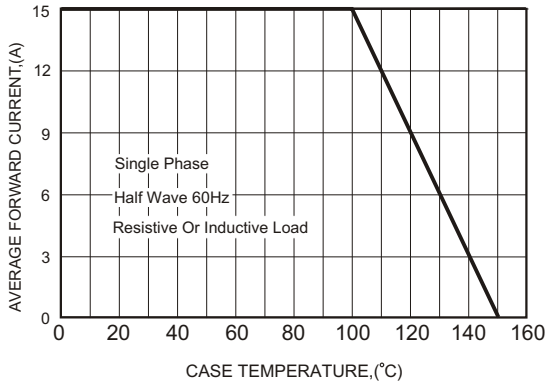


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

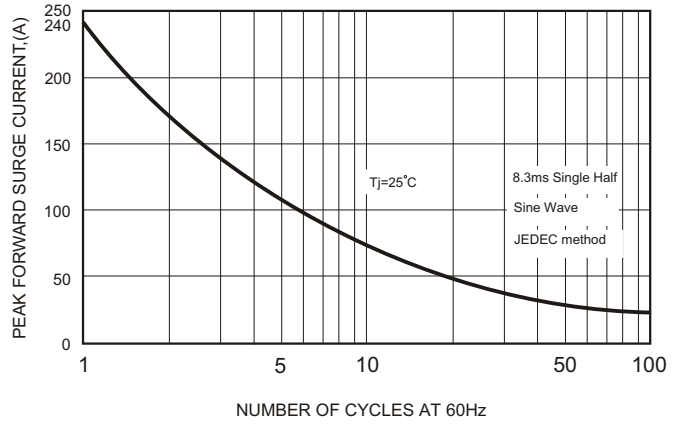


FIG.3-TYPICAL FORWARD CHARACTERISTICS

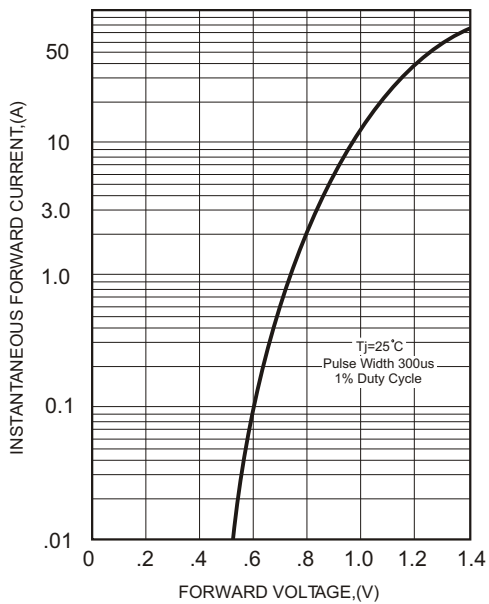


FIG.4-TYPICAL REVERSE CHARACTERISTICS

