



GBJ10005 thru GBJ1010

10.0 A Single-Phase Silicon Bridge Rectifier Rectifier Reverse Voltage 50 to 1000V

Features

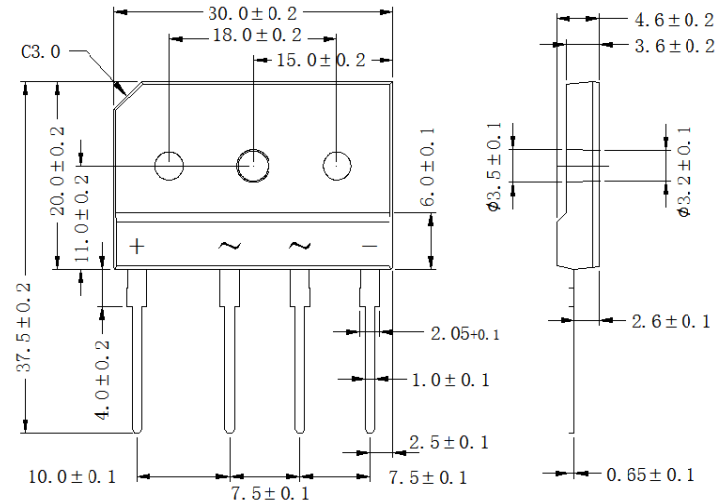
- Ideal for printed circuit board mounting
- This series is UL listed under the Recognized Component Index, file number E484648
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Built-in printed circuit board stand-offs
- High case dielectric strength
- High temperature soldering guaranteed 260°C/5 seconds at 5 lbs (2.3kg) tension

Mechanical Data

Case: Reliable low cost construction utilizing molded plastic technique

Terminals: Plated leads solderable per MIL-STD-202, Method 208

Mounting Position: Any



Dimensions in inches and (millimeters)

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
For Capacitive load derate current by 20%.

| CHARACTERISTICS | SYMBOL | GBJ 10005 | GBJ 1001 | GBJ 1002 | GBJ 1004 | GBJ 1006 | GBJ 1008 | GBJ 1010 | UNIT | |
|---|-------------------|-------------|----------|----------|----------|----------|----------|----------|------|------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum RMS Voltage | V _{RMS} | 30 | 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 _c =100°C (without heatsink) | I _(AV) | 10.0 | | | | | | | 2.5 | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | I _{FSM} | 200 | | | | | | | | A |
| Maximum Forward Voltage at 5.0A DC | V _F | 1.1 | | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I _R | 10 | | | | | | | 500 | μA |
| Typical Thermal Resistance (Note2) | R _{θJC} | 2.3 | | | | | | | | °C/W |
| Operating Temperature Range | T _J | -55 to +150 | | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | | | | | | °C |

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on 300mm*300mm*1.6mm cu plate heatsink.

Rating and Characteristic Curves ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)
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FIG.1-FORWARD CURRENT DERATING CURVE

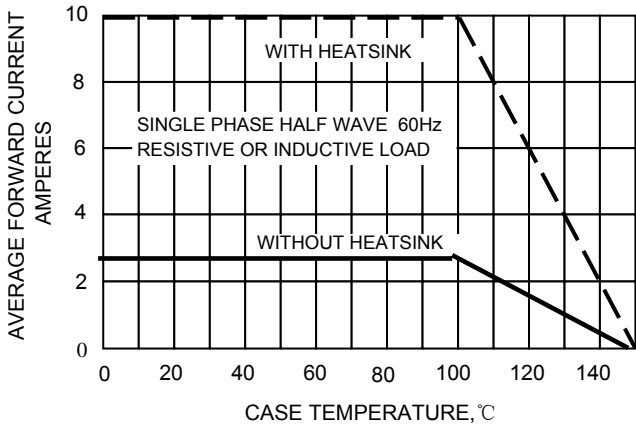


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

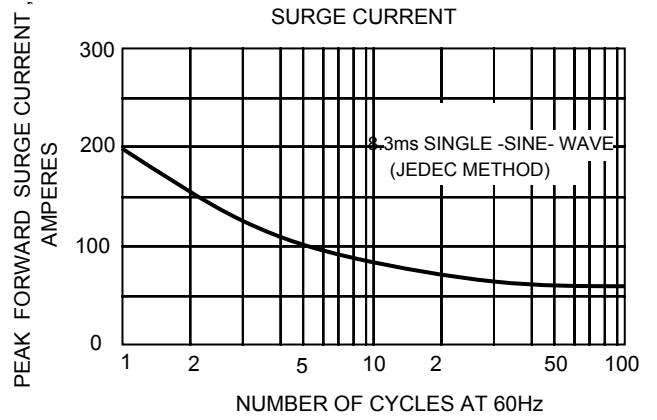


FIG.3-TYPICAL JUNCTION CAPACITANCE

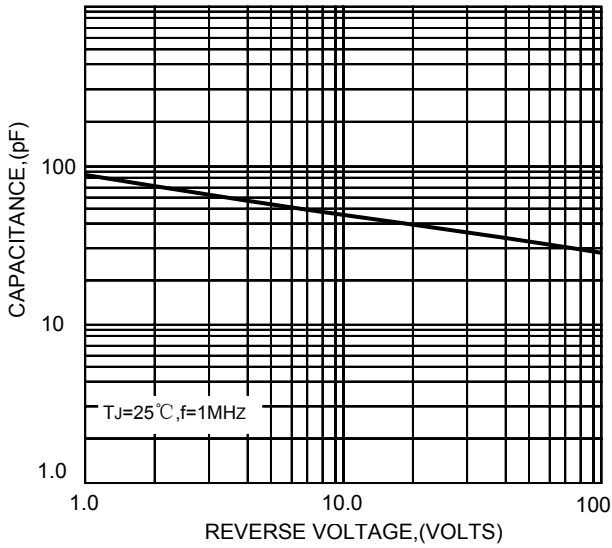


FIG.4-TYPICAL FORWARD CHARACTERISTICS

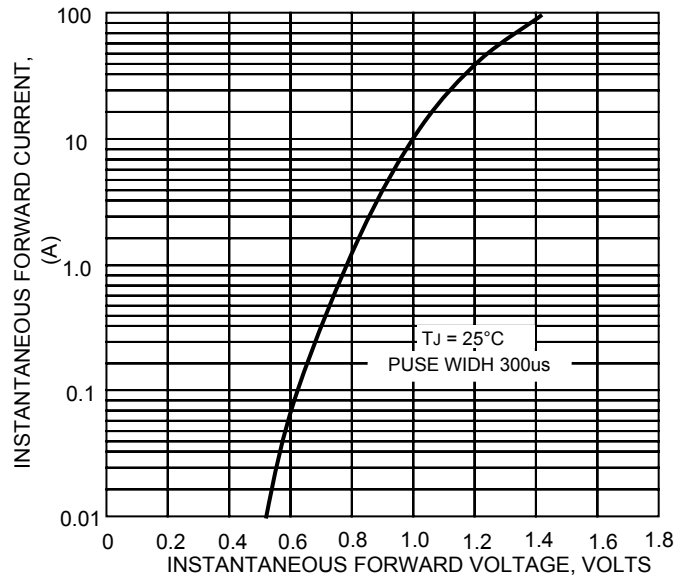


FIG.5-TYPICAL REVERSE

