

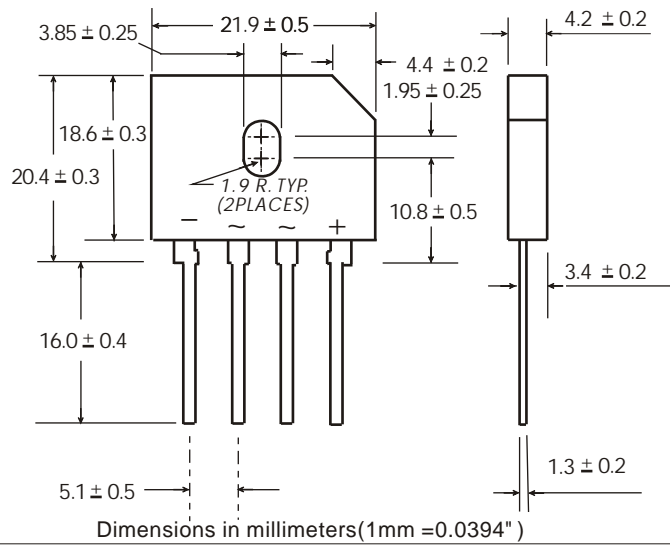
Machanical Dimensions

Descriptions

GBU800~812



GBU



Features

- Ideal for P.C. Board mounting
- High surge current capability
- This series is UL listed under the Recognized Component Index, file number E142814
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- High temperature soldering guaranteed 265 C°/10 seconds at 5 lbs (2.3kg) tension

Mechanical Data

- Case: Molded plastic body
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Mounting Position:: Any
- Weight: 3.8 grams (approx)

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%.

| Parameter | Symbol | GBU 800 | GBU 801 | GBU 802 | GBU 804 | GBU 806 | GBU 808 | GBU 810 | GBU 812 | unit |
|---|------------------|--------------|---------|---------|---------|---------|---------|---------|---------|--------------------|
| Maximum repetitive peak reverse voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | 1200 | V |
| Maximum RMS bridge input voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | 840 | V |
| Maximum DC blocking voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | 1200 | V |
| Maximum average forward rectified output current at TA=100°C | IF(AV) | 8.0 | | | | | | | | A |
| Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method) | IFSM | 200 | | | | | | | | A |
| Rating for fusing (t<8.3ms) | I ² t | 166 | | | | | | | | A ² sec |
| Typical thermal resistance per element(1) | ReJA | 2.2 | | | | | | | | °C / W |
| Operating junction and storage temperature range | TJ, TSTG | -55 to + 150 | | | | | | | | °C |
| Max. instantaneous forward voltage drop per leg at 6.0A | VF | 1.1 | | | | | | | | V |
| Max. DC reverse current at rated Ta=25°C | IR | 5.0 | | | | | | | | uA |
| Max. DC reverse current at rated Ta=125°C | IR | 500 | | | | | | | | uA |

Notes: Thermal resistance from Junction to Ambient on PC board mounting

Rating and Characteristic Curves (TA=25°C Unless otherwise noted) GBU800 thru GBU810

Fig. 1 Derating Curve for Output Rectified Current

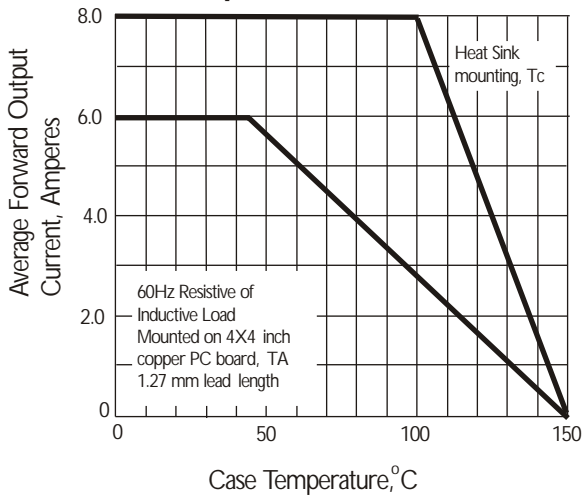


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

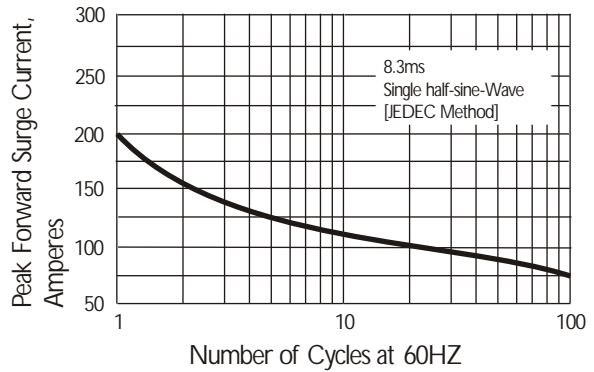


Fig. 3 Typical Instantaneous Forward Characteristics

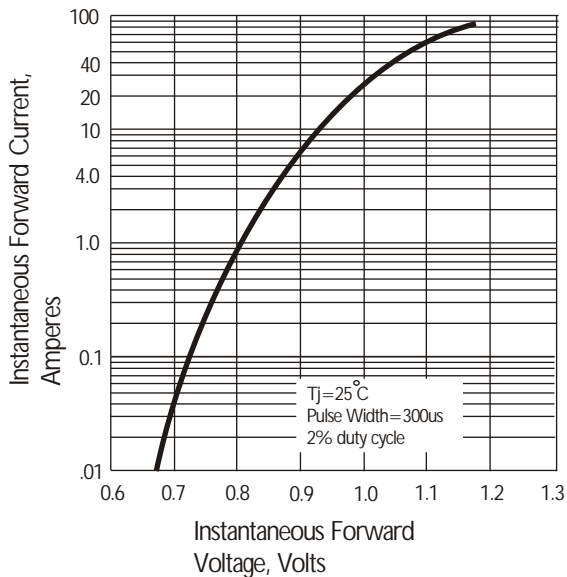


Fig. 4 Typical Reverse Characteristics

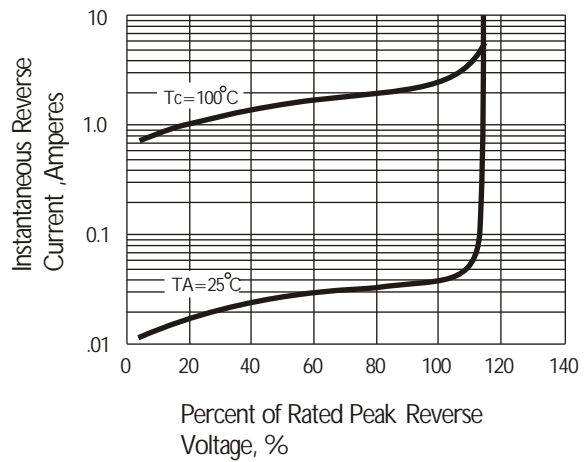


Fig. 5 Typical Junction Capacitance

