

CURRENT 8.0 Ampere
 VOLTAGE RANG 50 to 1000 Volts

GBU8005 THRU GBU810

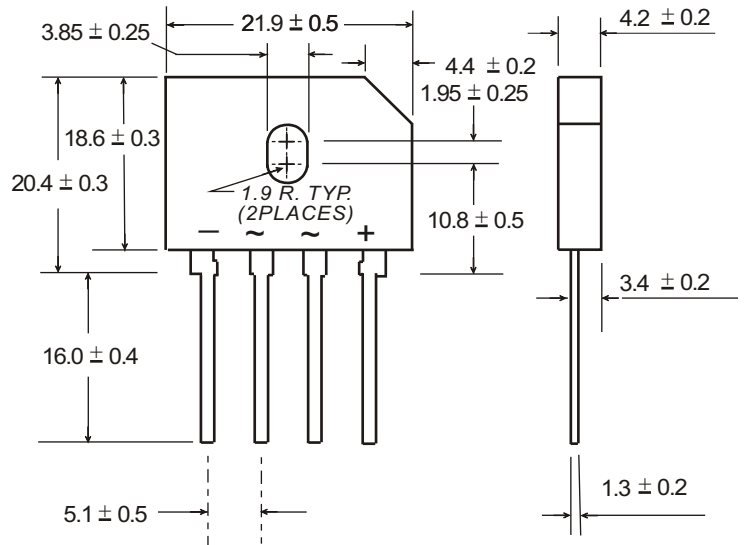
GBU

Features

- This series is SGS listed under the Recognized Component Index, file number SZXEC1902259902
- Ideal for P.C. Board mounting
- High surge current capability
- 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
 Polarity: Polarity symbols molded on body
 Mounting Position: Any
 Mounting Torque: 5 in-lbs max.
 Weight: 4.0 grams (approx)



Dimensions in millimeters(1mm = 0.0394")

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 8005 | GBU 801 | GBU 802 | GBU 804 | GBU 806 | GBU 808 | GBU 810 | unit |
|---|------------------|----------|---------|---------|--------------|---------|---------|---------|--------------------|
| Maximum repetitive peak reverse voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS bridge input voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward (with heatsink note1) rectified current at TA=100 C (without heatsink) | 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(note 1) | RthJC | | | | 2.2 | | | | °C / W |
| Operating junction and storage temperature range | TJ, TSTG | | | | -55 to + 150 | | | | °C |

Electrical Characteristics

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

| Parameter | Symbol | GBU 8005 | GBU 801 | GBU 802 | GBU 804 | GBU 806 | GBU 808 | GBU 810 | Unit |
|---|--------|----------|---------|---------|---------|---------|---------|---------|------|
| Maximum instantaneous forward voltage drop per leg at 4.0A | VF | | | | 1.1 | | | | V |
| Maximum DC reverse current at rated DC blocking voltage per element | IR | | | | 5.0 | | | | μA |
| | | | | | 500 | | | | |

Notes: (1) Device mounted on 100mm x 100mm x 1.6mm Cu Plate Heatsink.

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Rating and Characteristic Curves ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

Fig. 1 Derating Curve for Output Rectified Current

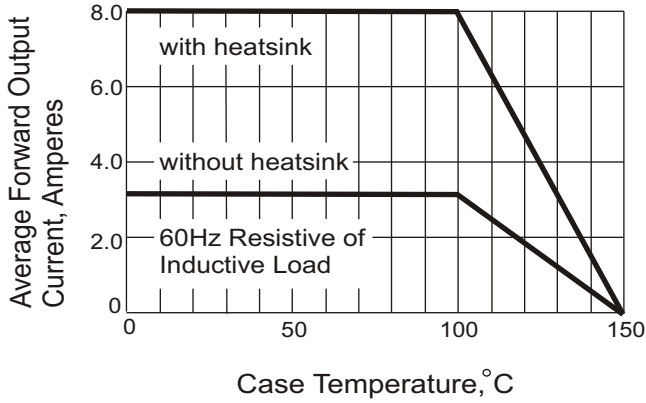


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

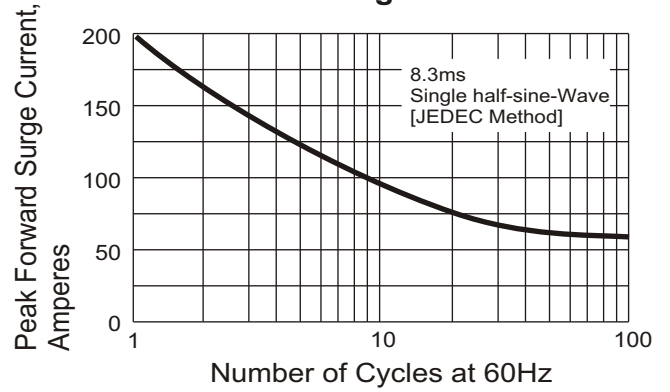


Fig. 3 Typical Instantaneous Forward Characteristics

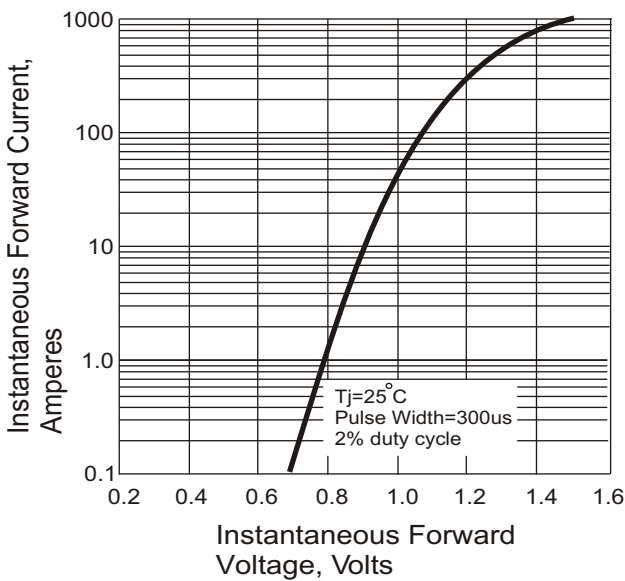


Fig. 4 Typical Revers Characteristics

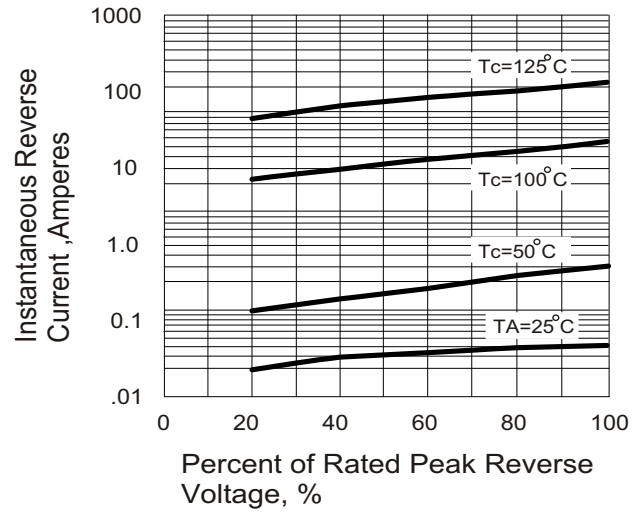


Fig. 5 Typical Junction Capacitance

