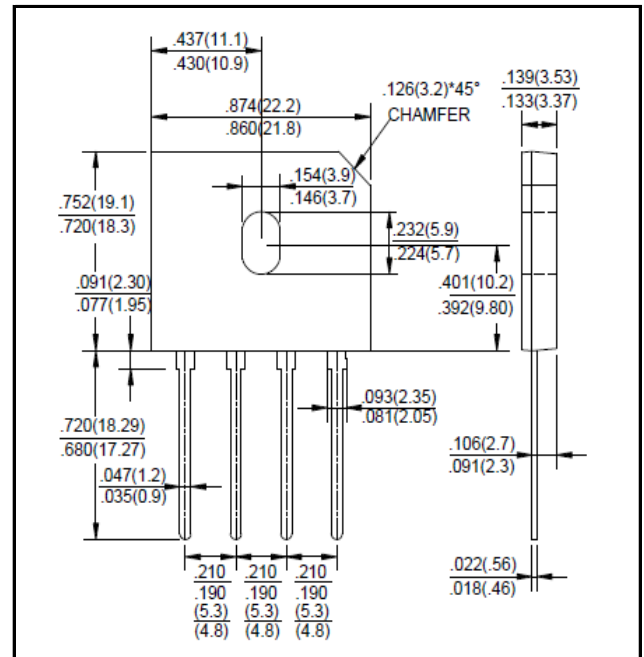


6.0A Single-Phase GLass Passivated Bridge Rectifiers



Recifier Reverse Voltage 50V to 1000V

GBU



Features

- Glass passivated junction
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Suge overload ratings to 175 amperes peak
- Ideal for printed circuit board application
- High temperature soldering guaranteed 265°C/10

Mechanical Data

Case: Molded plastic
 Terminals: Platde leads solderable per MIL-STD-750, Method 2026
 Polarity: Polarity symbols molded or Marked on body
 Mounting Position: Any
 Weight: 0.138ounce, 3.9 grams (approx)

Maximum Ratings & Thermal Characteristics

Dimensions in inches and (millimeters)

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

| Parameter | Symbol | GBU6005 | GBU601 | GBU602 | GBU604 | GBU606 | GBU608 | GBU610 | 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 rectified output current at TA=40°C | IF(AV) | | | | 6.0 | | | | A |
| Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method) | IFSM | | | | 175 | | | | A |
| Rating for fusing (t<8.3ms) | I ² t | | | | 127 | | | | A ² sec |
| Typical thermal resistance per element(1) | ReJA | | | | 2.2 | | | | °C/w |
| Mounting torque (Suggests 045~0.65) | Tor | Rating Torque: 0.8 (Suggests 045~0.65) | | | | | | | N.m |
| Typical thermal resistance per element(2) | Cj | | | | 50.0 | | | | PF |
| Operating junction and storage temperature range | TJ, TSTG | | | | -55to+150 | | | | °C |

Electrical Characteristics

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

| Parameter | Symbol | GBU6005 | GBU601 | GBU602 | GBU604 | GBU606 | GBU608 | GBU610 | unit |
|--|--------|---------|--------|--------|--------|--------|--------|--------|------|
| Maximum instantaneous forward voltage drop per leg at 3.0A | VF | | | | 1.1 | | | | V |
| Maximum DC reverse current at ratde TA=25°C | IR | | | | 10 | | | | UA |
| DC blocking voltage per element TA=125°C | | | | | 500 | | | | |

Notes: (1) Device mounted on 75mm*75mm*1.6mm Cu plate heatsink.
 (2) Measured at 1.0MHz and applied reverse voltage of 4.0 volts.

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

FIG.1-DERATING CURVE FOR

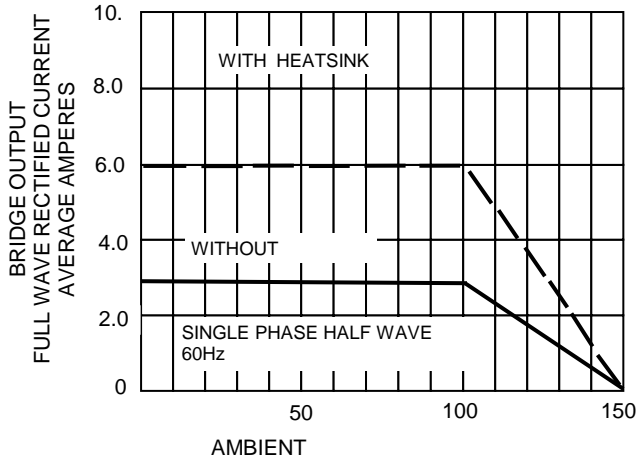


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

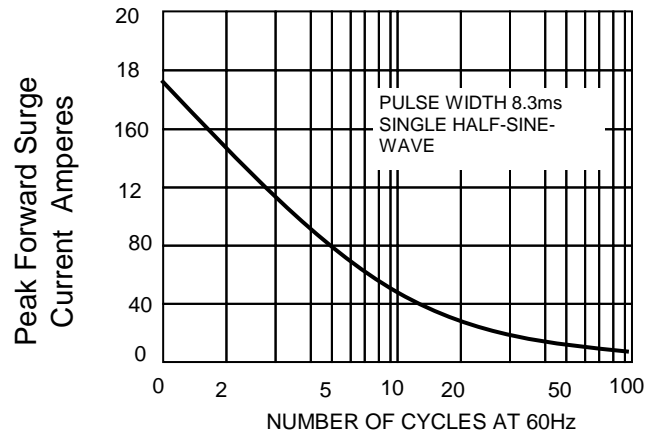


FIG.3-TYPICAL JUNCTION

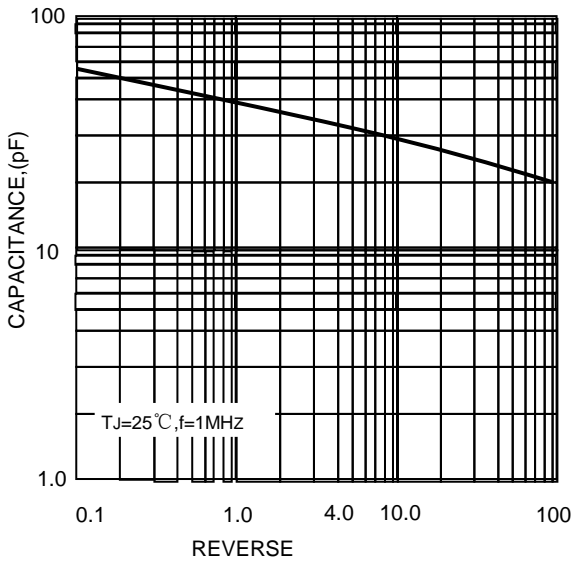


FIG.4-TYPICAL FORWARD CHARACTERISTICS

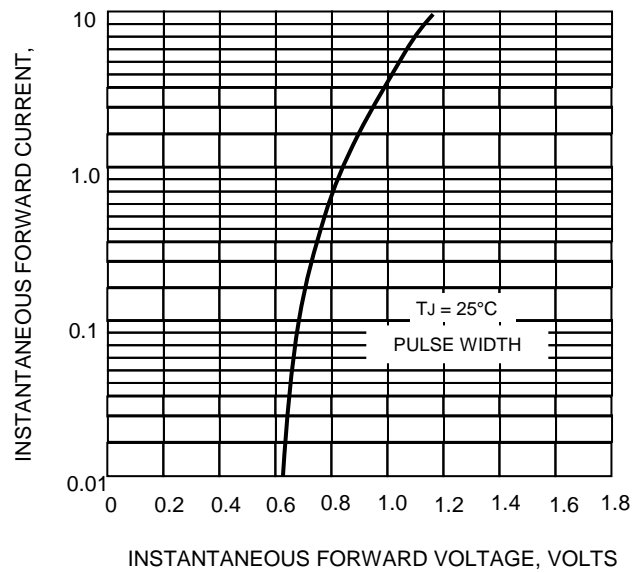


FIG.5-TYPICAL REVERSE CHARACTERISTICS

