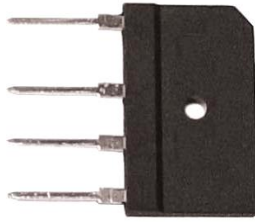
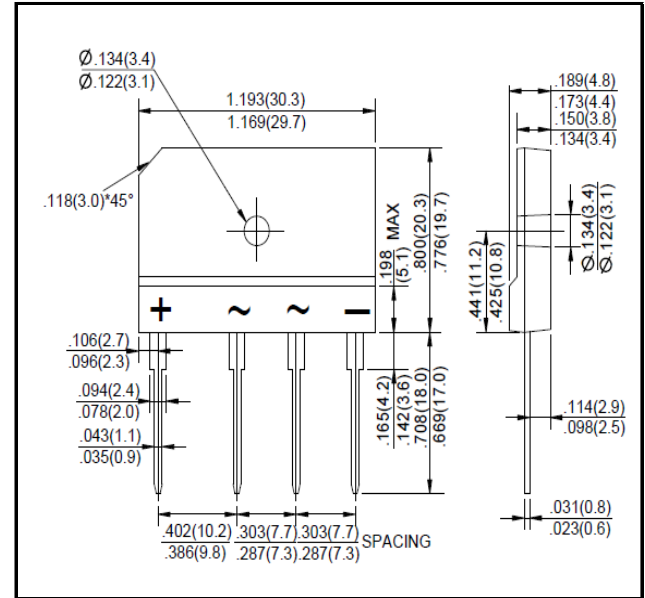


40A Single-Phase GLass Passivated Bridge Rectifiers

Recifier Reverse Voltage 50V to 1000V



GBJ



Features

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has U/L flammability classification 94V-0
- Weight: 0.24ounce, 6.79 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 | GBJ 40005 | GBJ 4001 | GBJ 4002 | GBJ 4004 | GBJ 4006 | GBJ 4008 | GBJ 4010 | 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) | 40.0 | | | | | | | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 4.2 | | | | | | | A |
| Maximum instantaneous forward voltage drop per leg at 20A DC | VF | 380 | | | | | | | V |
| Maximum DC reverse current at ratde TA=25°C | IR | 5 | | | | | | | UA |
| DC blocking voltage per element TA=125°C | | 500 | | | | | | | |
| Rating for fusing(t<8.3ms) | I ² t | 599 | | | | | | | A ² sec |
| Typical thermal resistance per element(1) | ReJA | 1.6 | | | | | | | °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 | 85.0 | | | | | | | PF |
| Operating junction and stroage temperature range | TJ, TSTG | -55to+150 | | | | | | | °C |

Notes:(1)Device mounted on 300mm*300mm*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

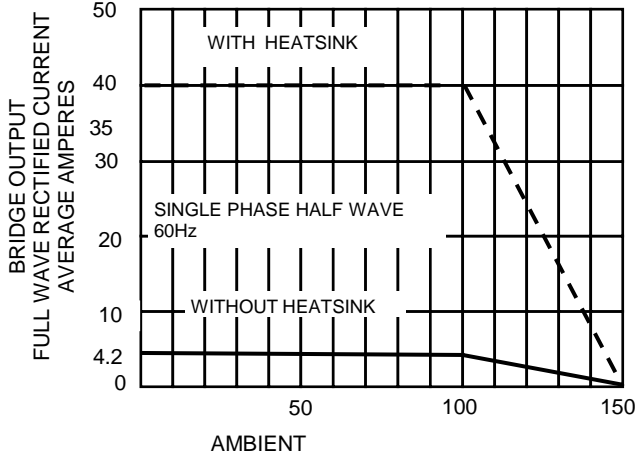


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

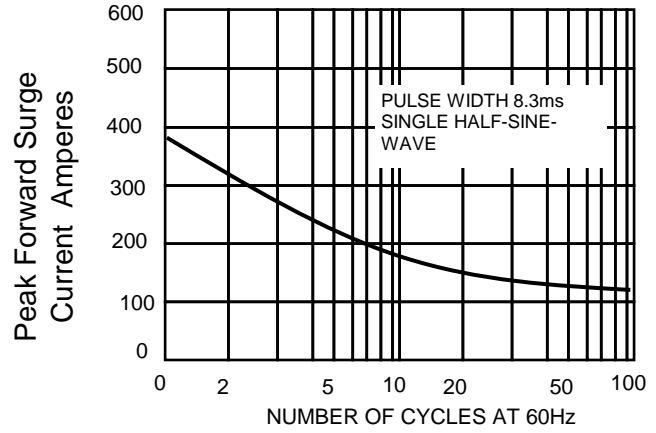


FIG.3-TYPICAL JUNCTION

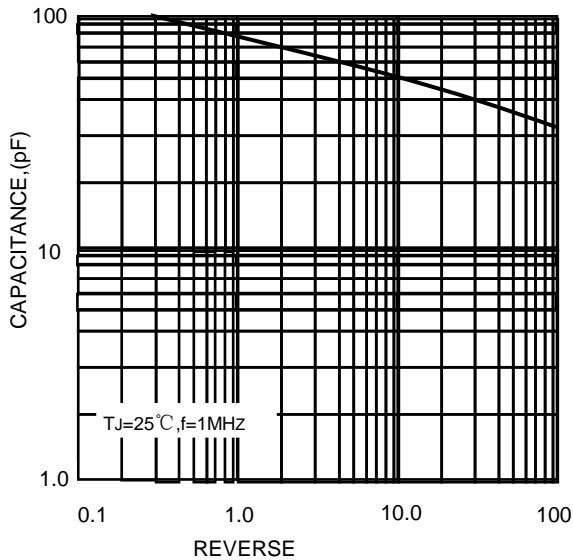


FIG.4-TYPICAL FORWARD CHARACTERISTICS

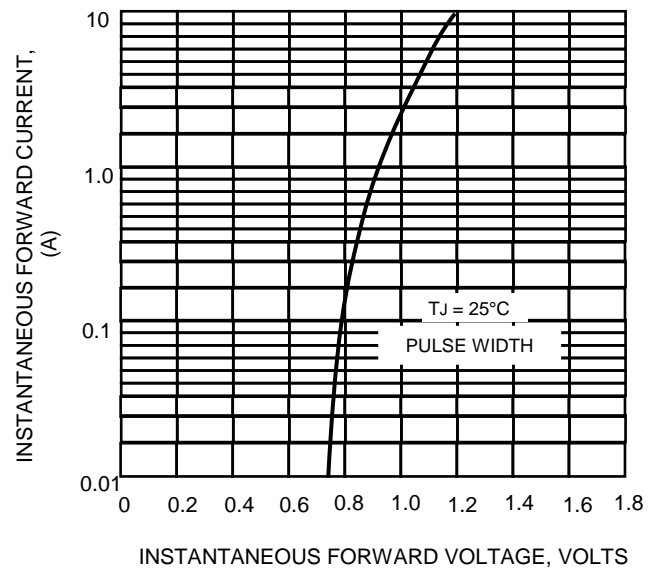


FIG.5-TYPICAL REVERSE CHARACTERISTICS

