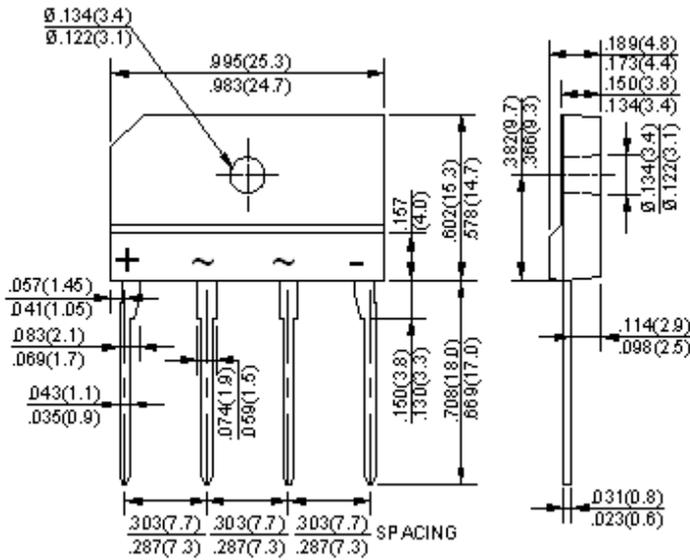


GBJ6005 thru GBJ610

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - 50 to 1000Volts

FORWARD CURRENT - 6.0Amperes



Dimensions in inches and (millimeters)

Package: 4GBJ

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: 0.151 ounces , 4.27grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

| CHARACTERISTICS | SYMBOL | GBJ 6005 | GBJ 601 | GBJ 602 | GBJ 604 | GBJ 606 | GBJ 608 | GBJ 610 | UNIT | |
|---|------------------|-------------|---------|---------|---------|---------|---------|---------|------|------------------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum RMS 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 Note 2) Rectified Current @ Tc=100°C (without heatsink) | I(AV) | 6.0 | | | | | | 2.8 | | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | IFSM | 175 | | | | | | | | A |
| Maximum Forward Voltage at 3.0A DC | VF | 1.1 | | | | | | | | V |
| Maximum DC Reverse Current @ Tj=25°C at Rated DC Blocking Voltage @ Tj=125°C | IR | 10.0 | | | | | | 500 | | uA |
| I ² t Rating for Fusing (t<8.3ms) | I ² t | 120 | | | | | | | | A ² s |
| Typical Junction Capacitance Per Element (Note1) | CJ | 55 | | | | | | | | pF |
| Typical Thermal Resistance (Note2) | RejC | 1.8 | | | | | | | | °C/W |
| Operating Temperature Range | TJ | -55 to +150 | | | | | | | | °C |
| Storage Temperature Range | TSTG | -55 to +150 | | | | | | | | °C |

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

2. Device mounted on 75mm*75mm*1.6mm cu plate heatsink.

GLASS PASSIVATED BRIDGE RECTIFIERS RATING AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

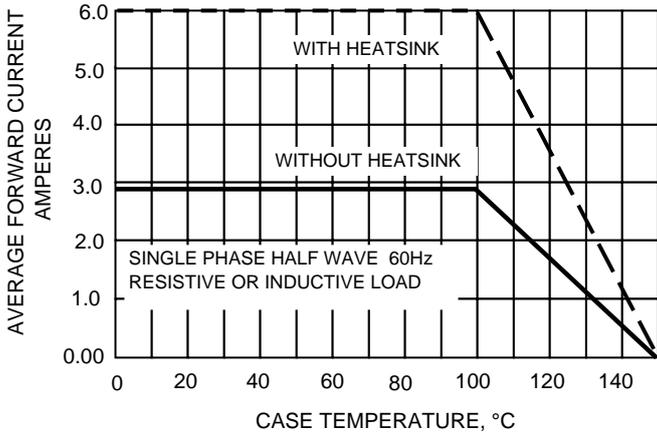


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

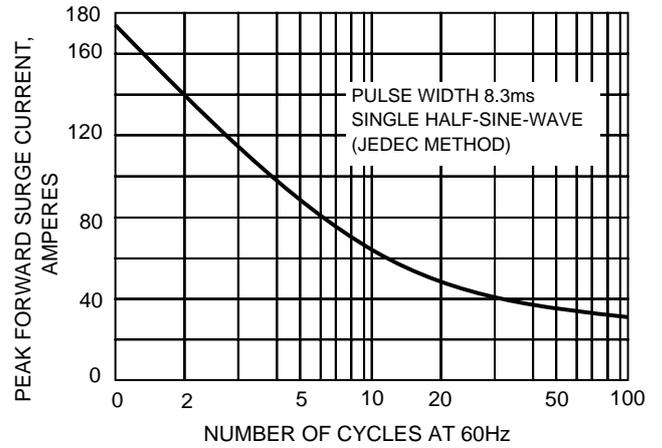


FIG.3-TYPICAL JUNCTION CAPACITANCE

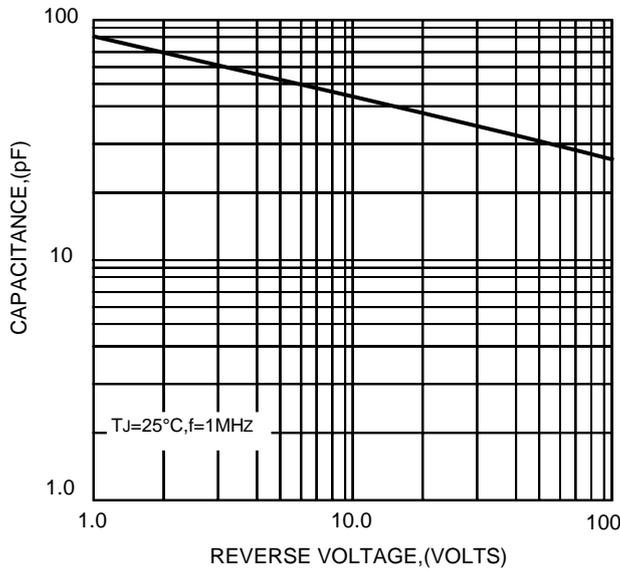


FIG.4-TYPICAL FORWARD CHARACTERISTICS

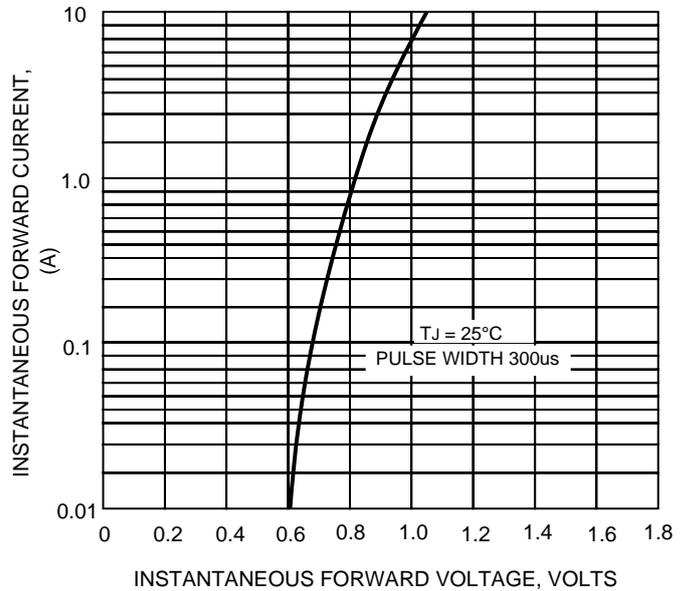


FIG.5-TYPICAL REVERSE CHARACTERISTICS

