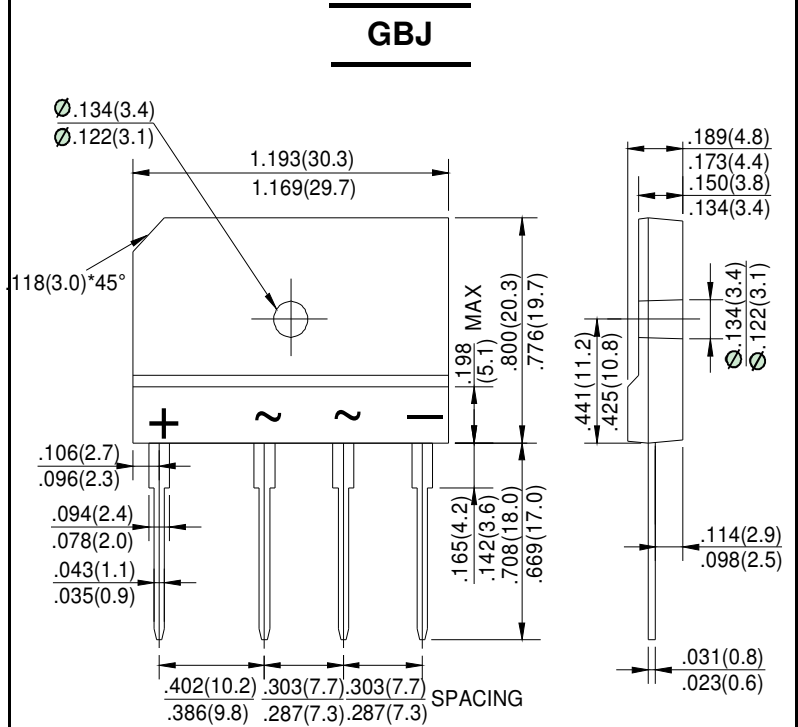


GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - 50 to 1000Volts
FORWARD CURRENT - 20 Amperes

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 UL flammability classification 94V-0



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 20005 | GBJ 2001 | GBJ 2002 | GBJ 2004 | GBJ 2006 | GBJ 2008 | GBJ 2010 | UNIT |
|---|-------------------|-------------|----------|----------|----------|----------|----------|----------|------------------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current (with heatsink Note 2) @ T _c =100°C (without heatsink) | I _(AV) | 20.0 3.6 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | I _{FSM} | 260 | | | | | | | A |
| Maximum Forward Voltage at 10.0A DC | V _F | 1.0 | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @ T _J =25°C @ T _J =125°C | I _R | 10.0 500 | | | | | | | μA |
| I ² t Rating for Fusing (t<8.3ms) | I ² t | 240 | | | | | | | A ² s |
| Typical Junction Capacitance Per Element (Note1) | C _J | 60 | | | | | | | pF |
| Typical Thermal Resistance | R _{θJC} | 0.8 | | | | | | | °C/W |
| Operating Temperature Range | T _J | -55 to +150 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | | | | | °C |

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

2. Device mounted on 300mm*300mm*1.6mm Cu plate heatsink.

FIG.1-FORWARD CURRENT DERATING CURVE

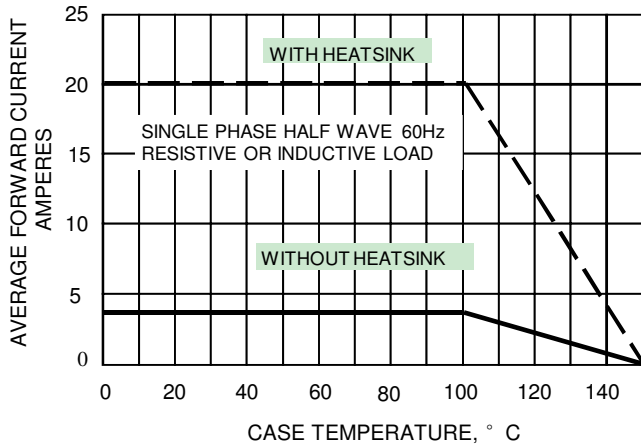


FIG.2-MAXMUN NON-REPETITIVE

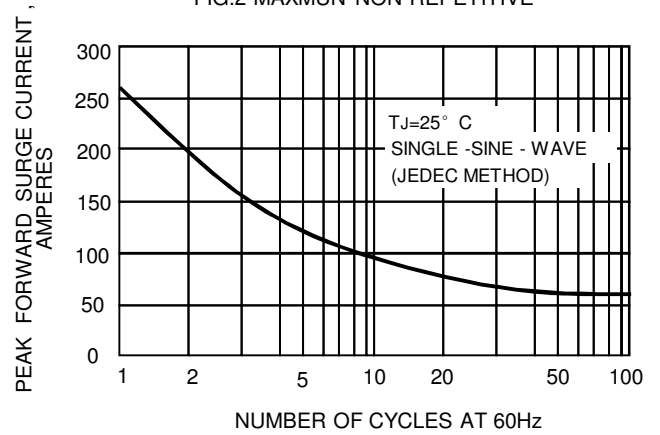


FIG.3-TYPICAL JUNCTION CAPACITANCE

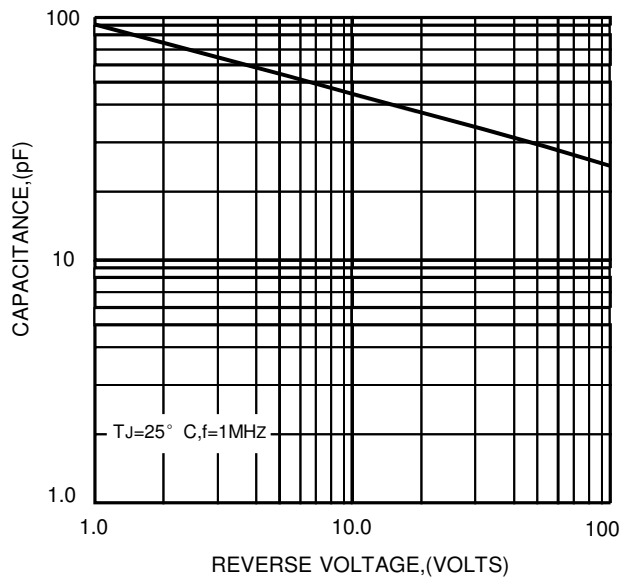


FIG.4-TYPICAL FORWARD CHARACTERISTICS

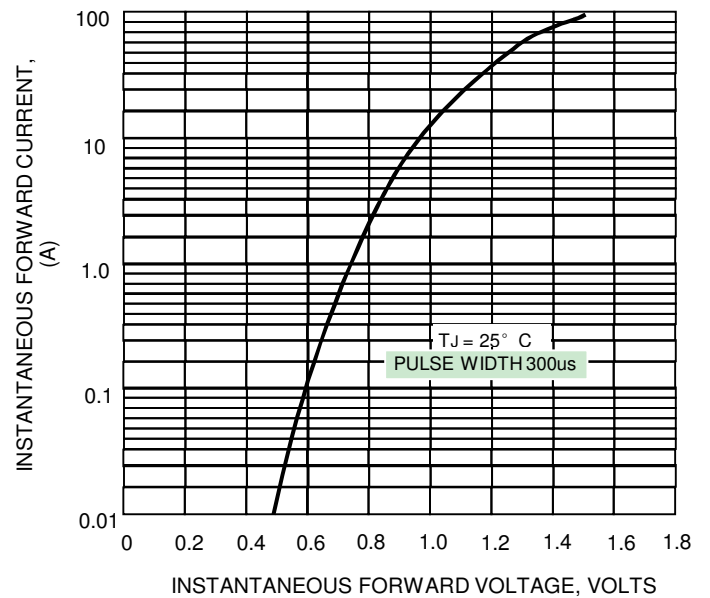


FIG.5-TYPICAL REVERSE CHARACTERISTICS

