



GBJ25A THRU GBJ25M

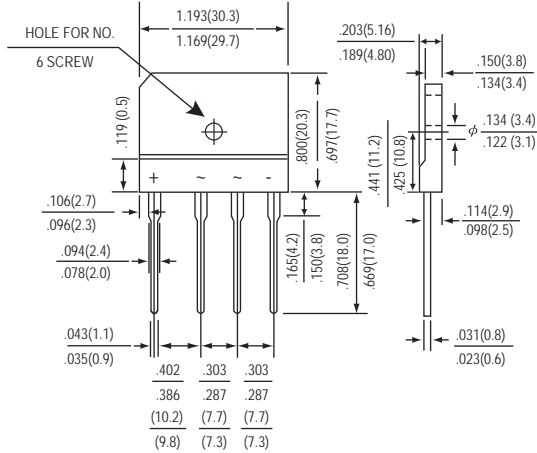
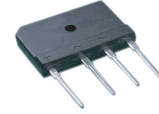
SINTERED GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 25.0 Amperes

PATENTED

GBJ



*Dimensions in inches and (millimeters)

SuperBridge with GPRC inside

SUPEREX IITM

FEATURES

- * Internal Constructure with GPRC (Glass Passivated Rectifier Chip) inside
- * High Case Dielectric Strength of 1500VRMS
- * Low Reverse Leakage Current
- * High Surge Current Capability
- * Ideal for Printed Circuit Board Applications
- * Plastic Material-UL Recognition Flammability Classification 94V-0

MECHANICAL DATA

Case : GBJ molded plastic

Terminals : Plated Leads, solderable per MIL-STD-750, Method 2026

Polarity : Molded on body

Mounting : Through Hole for # 6 screw

Mounting torque : 5.0 in-lbs maximum

Weight : 6.6 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| Ratings at 25 °C ambient temperature unless otherwise specified. | SYMBOLS | GBJ25A | GBJ25B | GBJ25D | GBJ25G | GBJ25J | GBJ25K | GBJ25M | UNITS |
|--|------------------|-------------|--------|--------|--------|--------|--------|--------|------------------|
| Maximum repetitive peak reverse voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC blocking voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum average forward (with heatsink Note 2) rectified current at Tc=100°C | I (AV) | 25 | | | | | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 350 | | | | | | | Amps |
| Maximum instantaneous forward voltage @ IF=12.5 A | VF | 1.05 | | | | | | | Volts |
| Maximum DC reverse current @Tc=25°C at rated DC blocking voltage @Tc=125°C | IR | 10 500 | | | | | | | uA |
| I ² t rating for fusing (t < 8.3ms) | I ² t | 510 | | | | | | | A ² s |
| Typical junction capacitance per element (NOTE 1) | CJ | 85 | | | | | | | pF |
| Typical thermal resistance (NOTE 2) | R θJC | 0.6 | | | | | | | K / W |
| Operating junction and storage temperature range | TJ,TSTG | -55 to +175 | | | | | | | °C |

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

(2) Device mounted on 300 x 300 x 1.6mm Cu Plate Heatsink.

RATINGS AND CHARACTERISTIC CURVES GBJ25A THRU GBJ25M

FIG.1 - FORWARD CURRENT DERATING CURVE

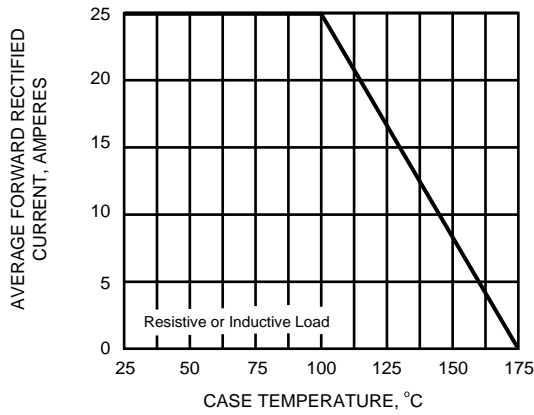


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

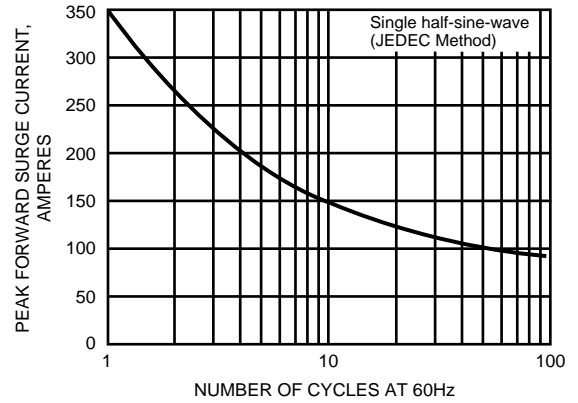


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

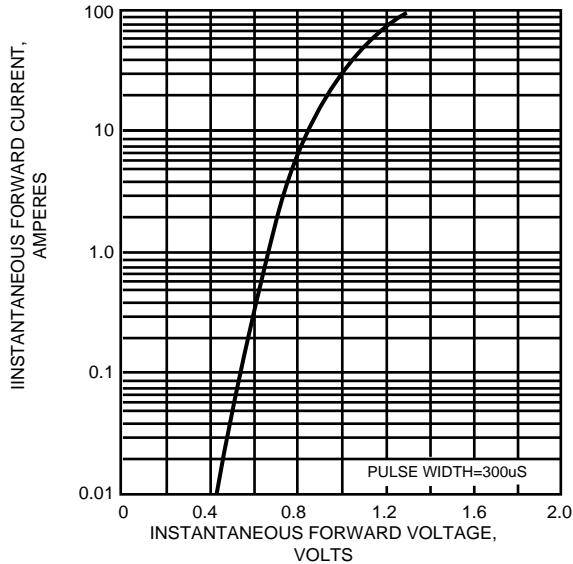


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

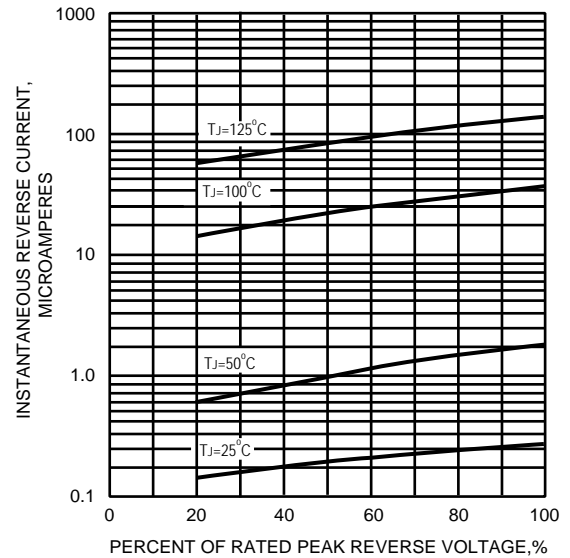


FIG.5 - TYPICAL JUNCTION CAPACITANCE

