

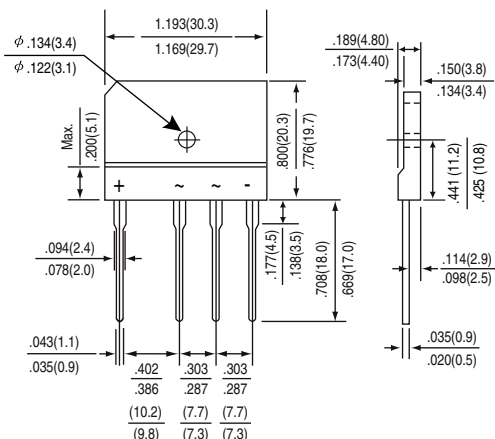


# GBJ20DH THRU GBJ20MH GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 200 to 1000 Volts

Forward Current - 20 Amperes

GBJ



\*Dimensions in inches and (millimeters)



## FEATURES

- \* Halogen-free type
  - \* Compliance to RoHS product
  - \* Ideal for printed circuit board
  - \* Low forward voltage drop, high current capability
  - \* Plastic Material-UL Recognition Flammability
- Classification 94V-0

## MECHANICAL DATA

**Case :** GBJ molded plastic

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

**Polarity :** As marked on Body

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| Ratings at 25°C ambient temperature<br>unless otherwise specified.                                  | SYMBOLS | GBJ20DH     | GBJ20GH | GBJ20JH | GBJ20KH | GBJ20MH | UNITS  |
|-----------------------------------------------------------------------------------------------------|---------|-------------|---------|---------|---------|---------|--------|
| Maximum repetitive peak reverse voltage                                                             | VRRM    | 200         | 400     | 600     | 800     | 1000    | Volts  |
| Maximum RMS voltage                                                                                 | VRMS    | 140         | 280     | 420     | 560     | 700     | Volts  |
| Maximum DC blocking voltage                                                                         | VDC     | 200         | 400     | 600     | 800     | 1000    | Volts  |
| Maximum average forward (with heatsink Note 2) rectified<br>current at Tc=100°C                     | I (AV)  | 20          |         |         |         |         | Amps   |
| Peak forward surge current 8.3ms single half sine-wave<br>superimposed on rated load (JEDEC Method) | IFSM    | 250         |         |         |         |         | Amps   |
| Maximum instantaneous forward voltage @ IF = 10 A                                                   | VF      | 1.1         |         |         |         |         | Volts  |
| Maximum DC reverse current @Tc=25°C<br>at rated DC blocking voltage @Tc=125°C                       | IR      | 10<br>500   |         |         |         |         | uA     |
| Typical junction capacitance per element (NOTE 1)                                                   | CJ      | 60          |         |         |         |         | pF     |
| Typical thermal resistance (NOTE 2)                                                                 | R θJC   | 0.8         |         |         |         |         | °C / W |
| Operating junction and storage temperature range                                                    | TJ,TSTG | -55 to +150 |         |         |         |         | °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 GBJ20DH THRU GBJ20MH

FIG.1 - FORWARD CURRENT DERATING CURVE

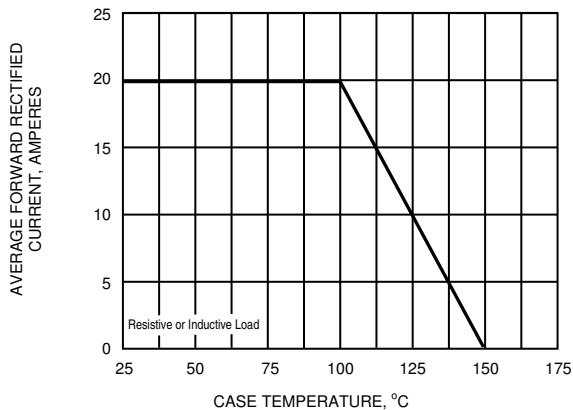


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

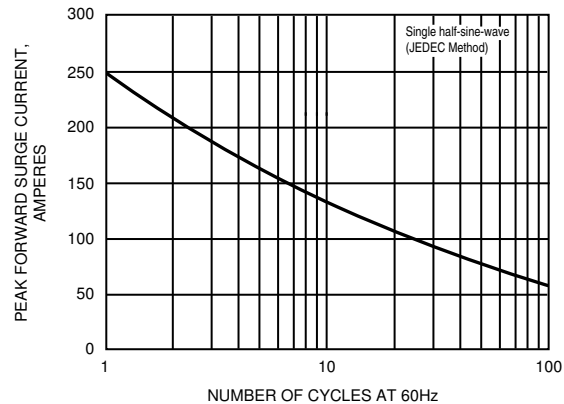


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

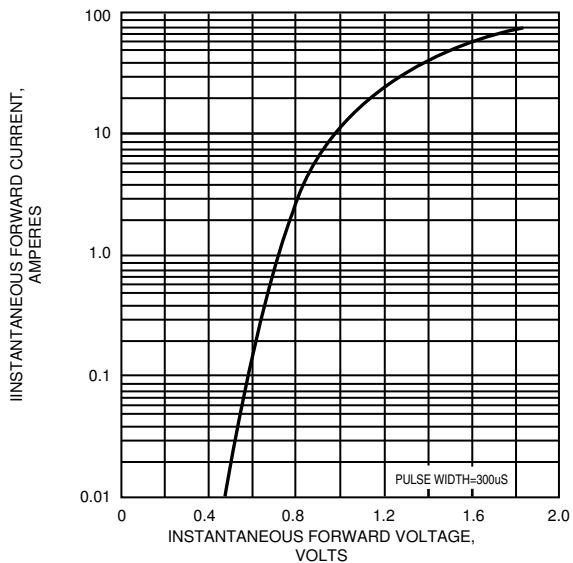


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

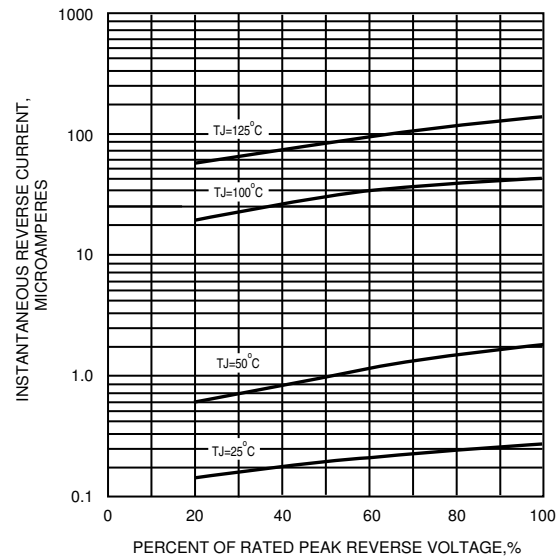


FIG.5 - TYPICAL JUNCTION CAPACITANCE

