



GBJ/KBJ4005 THRU GBJ/KBJ410

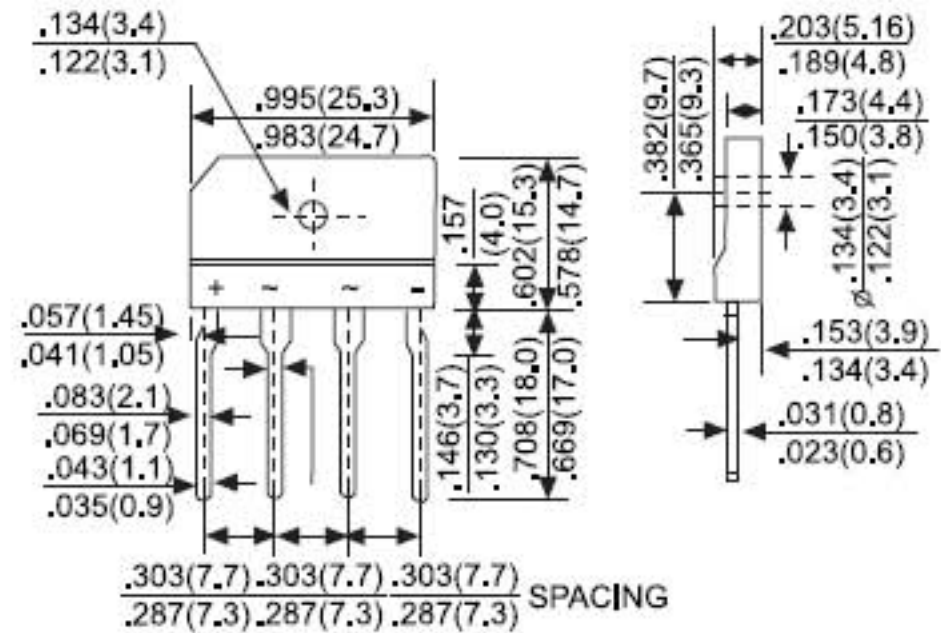
**SINGLE PHASE 4.0AMPS.
GLASS PASSIVATED BRIDGE
RECTIFIERS**

**Voltage Range
50 to 1000 Volts
Current
4.0 Amperes**

FEATURES

- UL Recognized File # 230084
- Surge overload rating - 50 amperes peak
- Ideal for printed circuit board
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Mounting Position:Any

GBJ4



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 50Hz, resistive or inductive load.
For capacitive load, derate current by 20%

| Type Number | | GBJ | GBJ | GBJ | GBJ | GBJ | GBJ | GBJ | UNITS |
|---|------------------|-------------|------------|------------|------------|------------|------------|------------|------------------|
| | | KBJ 4005 | KBJ 401 | KBJ 402 | KBJ 404 | KBJ 406 | KBJ 408 | KBJ 410 | |
| Maximum Repetitive 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) | IF(AV) | | | | 4.0 2.4 | | | | A |
| Peak Forward Surge Current 8.3ms single half sine wave super imposed on rated load (JEDEC Method) | IFSM | | | | 120 | | | | A |
| Maximum Instantaneous Forward Voltage Drop Per leg @4.0A | VF | | | | 1.1 | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | IR | | | | 5.0 500 | | | | uA |
| I ² t Rating for fusing (t<8.3ms) | I ² t | | | | 93 | | | | A ² S |
| Typical Junction Capacitance per Leg (Note 1) | CJ | | | | 45 | | | | pF |
| Typical Thermal Resistance (Note 2) | RθJC | | | | 2.2 | | | | °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 4.0 V DC,
2. Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.



RATING AND CHARACTERISTIC CURVES GBJ/KBJ4005 thru GBJ/KBJ410

FIG.1 - FORWARD CURRENT DERATING CURVE

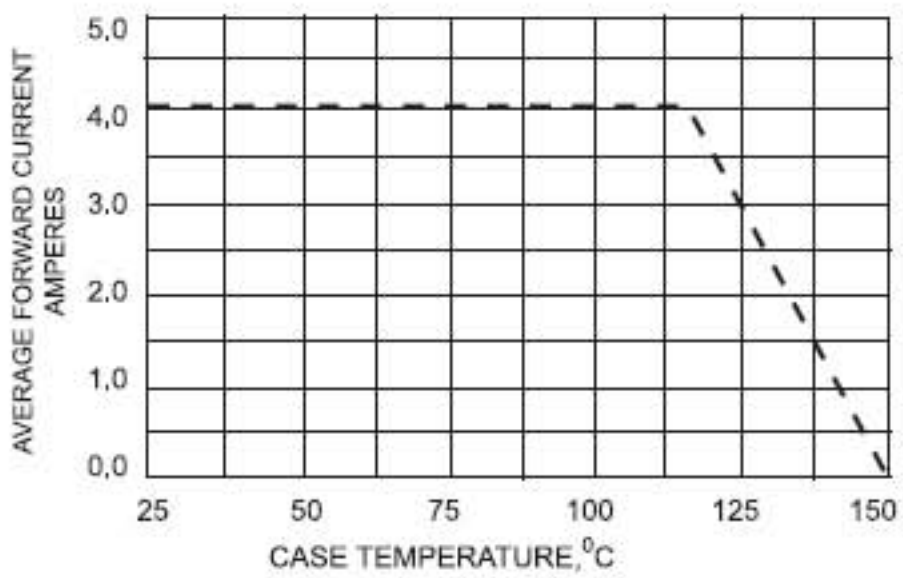


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

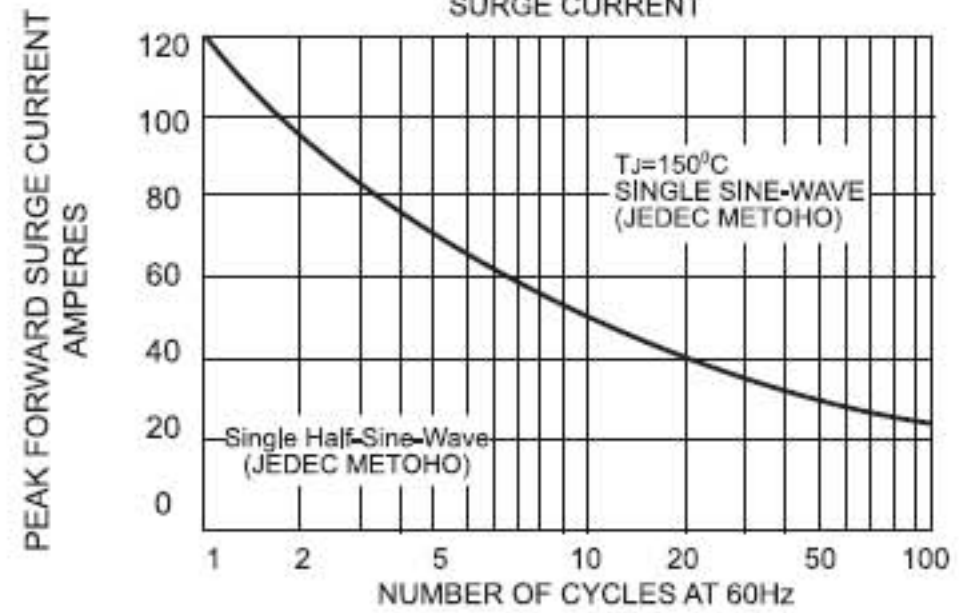


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

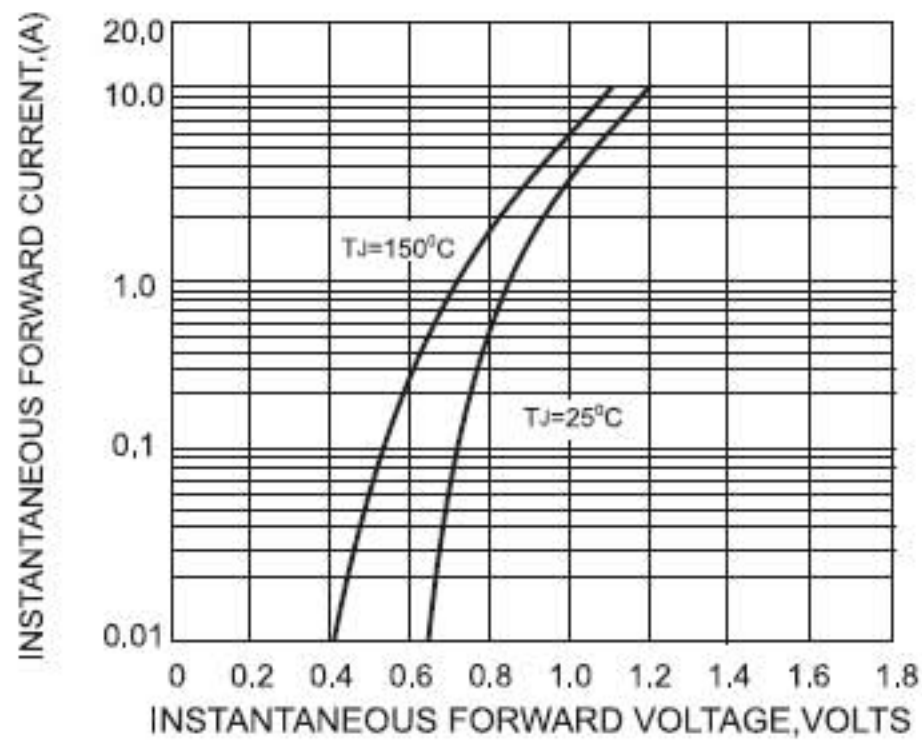


FIG.5-TYPICAL REVERSE CHARACTERISTICS

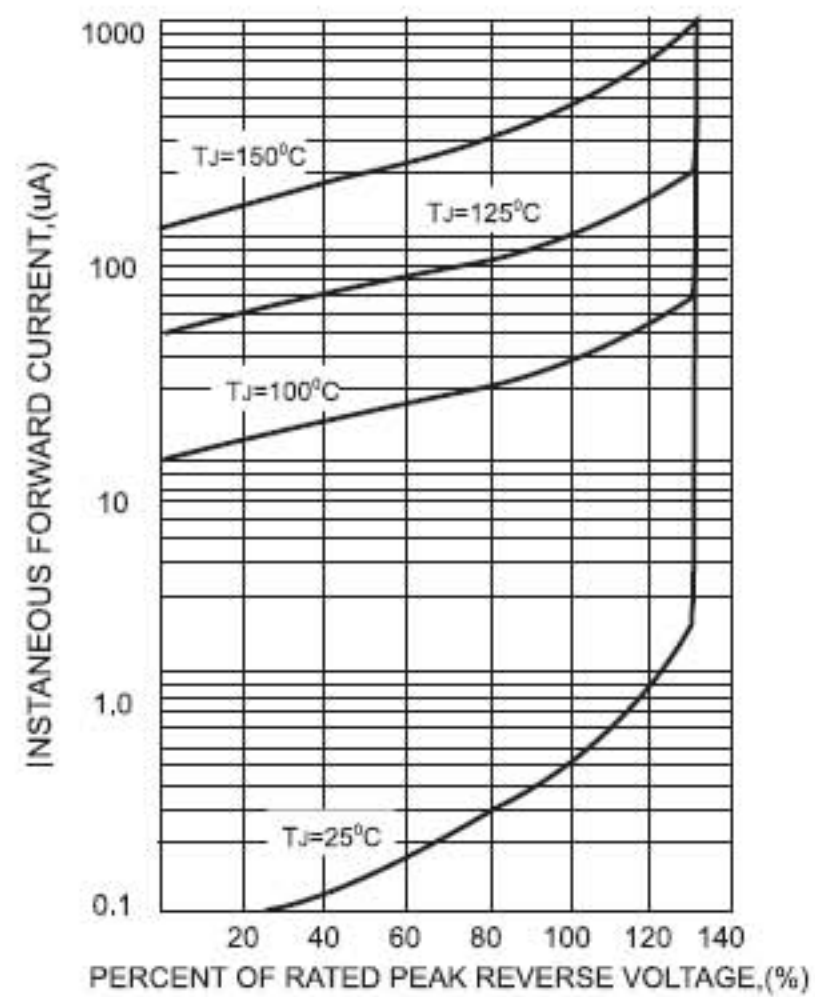


FIG.4-TYPICAL JUNCTION CAPACITANCE

