



GBJ/KBJ25005 THRU GBJ/KBJ2510

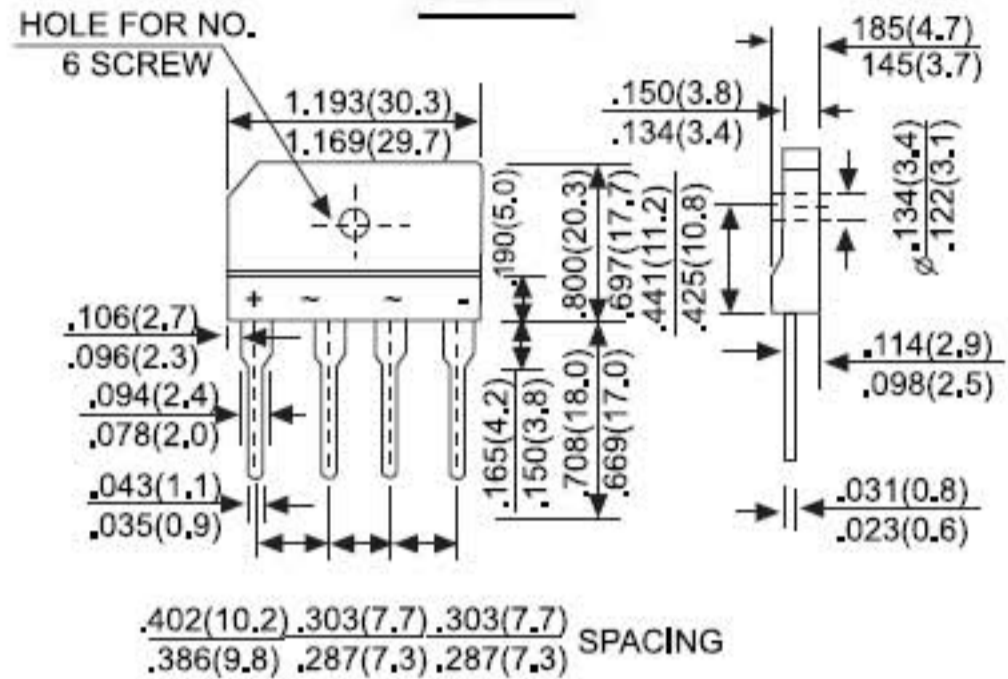
**SINGLE PHASE 25AMPS.
GLASS PASSIVATED BRIDGE
RECTIFIERS**

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

FEATURES

- UL Recognized File # E-230084
- 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 94 V-0

GBJ6



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 | KBJ | KBJ | KBJ | KBJ | KBJ | KBJ | |
| | | 25005 | 2501 | 2502 | 2504 | 2506 | 2508 | 2510 | |
| Maximum Repetitive 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 (with heatsink Note 2) Rectified Current@T _c = 100°C (without heatsink) | I _{F(AV)} | 25.0 4.2 | | | | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load(JEDEC Method) | I _{FSM} | 400 | | | | | | | A |
| Maximum Instantaneous Forward Voltage Drop Per Leg @12.5A | V _F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I _R | 5 100 | | | | | | | uA |
| | | T _J = 25°C T _J = 125°C | | | | | | | |
| i ² t Rating for fusing (t<8.3ms) | i ² t | 510 | | | | | | | A ² S |
| Typical Junction Capacitance per Leg (Note 1) | C _J | 85 | | | | | | | pF |
| Typical Thermal Resistance(Note 2) | R _{θJC} | 0.6 | | | | | | | °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 x 300mm x 1.6mm Cu Plate Heatsink.

RATING AND CHARACTERISTIC CURVES GBJ/KBJ25005 THRU GBJ/KBJ2510



FIG.1 - FORWARD CURRENT DERATING CURVE

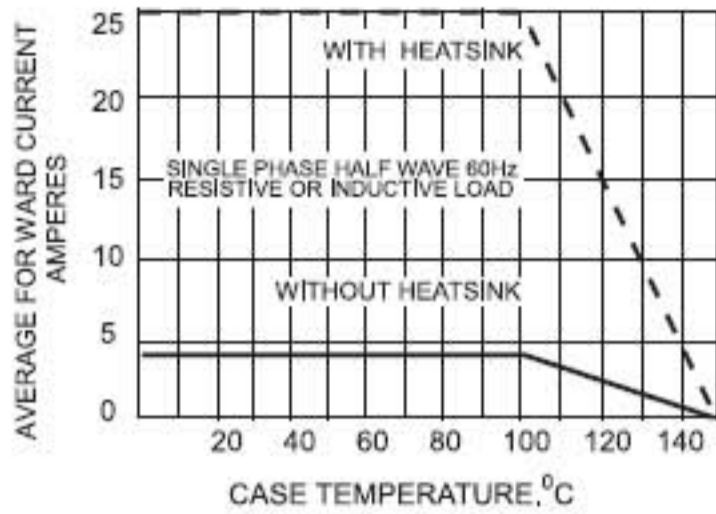


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

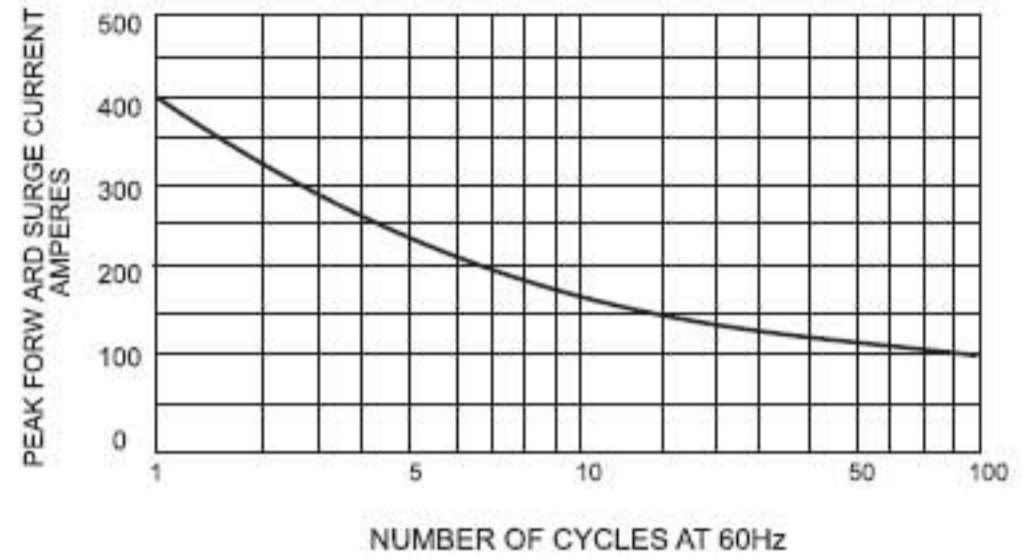


FIG.3 - TYPICAL JUNCTION CAPACITANCE

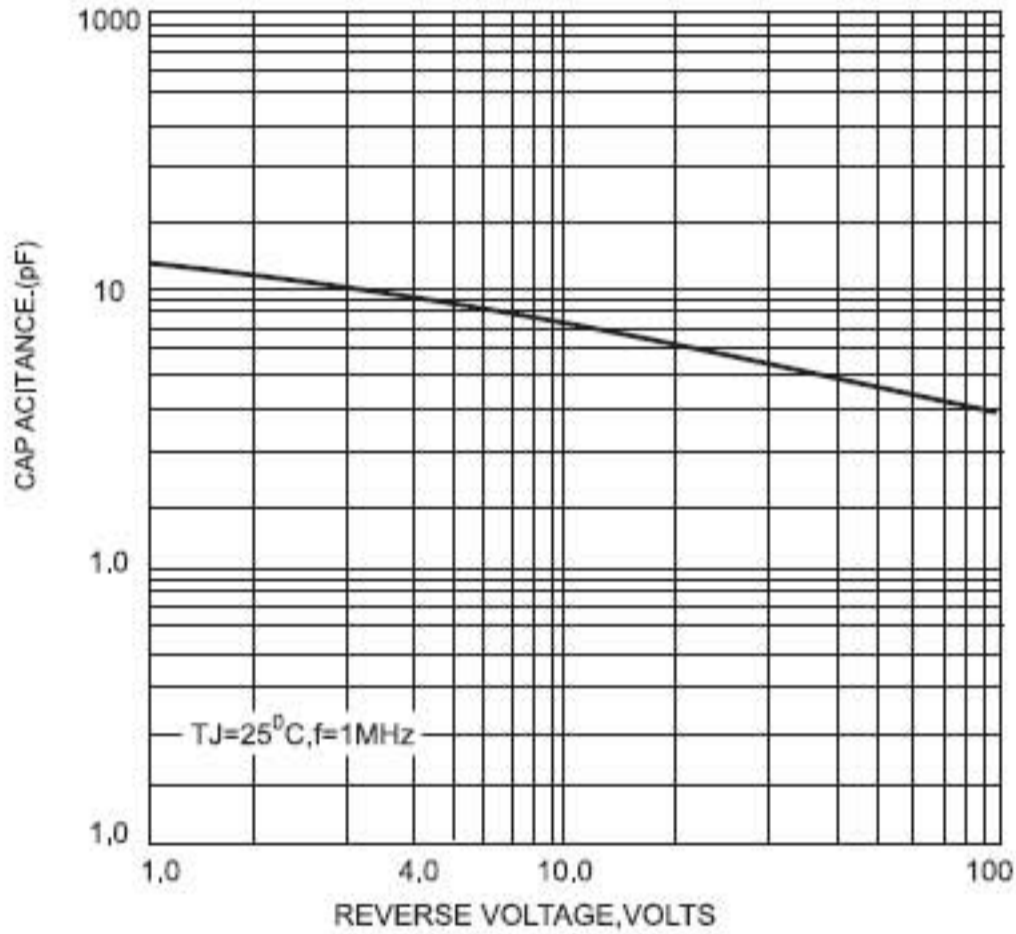


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

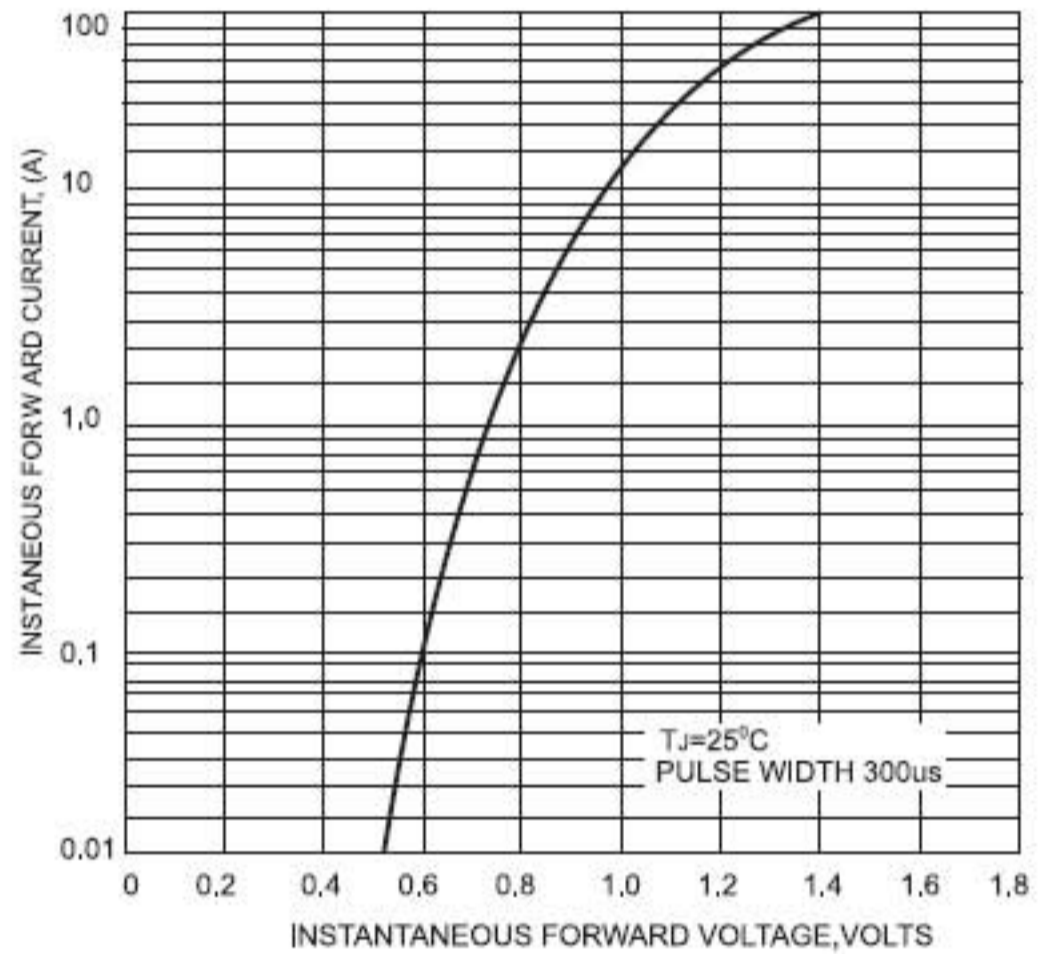


FIG.5-TYPICAL REVERSE CHARACTERISTICS

