

GBJ6005 THRU GBJ610

GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 6.0 Ampere

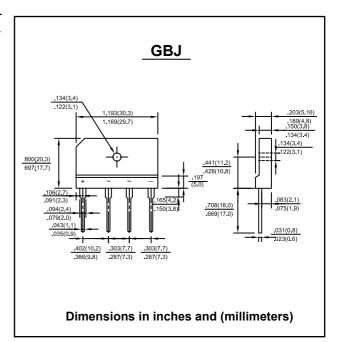
FEATURES

- Glass passivated chip junction
- Reliable low cost construction utilizing molded plastic technique
- Ideal for printed circuit board
- Low reverse leakage current
- Low forward voltage drop
- High surge current capabiliy

MECHANICAL DATA

- Case:Molded plastic, GBJ
- Terminals: Terminals: Leads solderable per MIL-STD-202 method 208 guaranteed
- Epoxy: UL 94V-0 rate flame retardant
- Mounting Position: Any





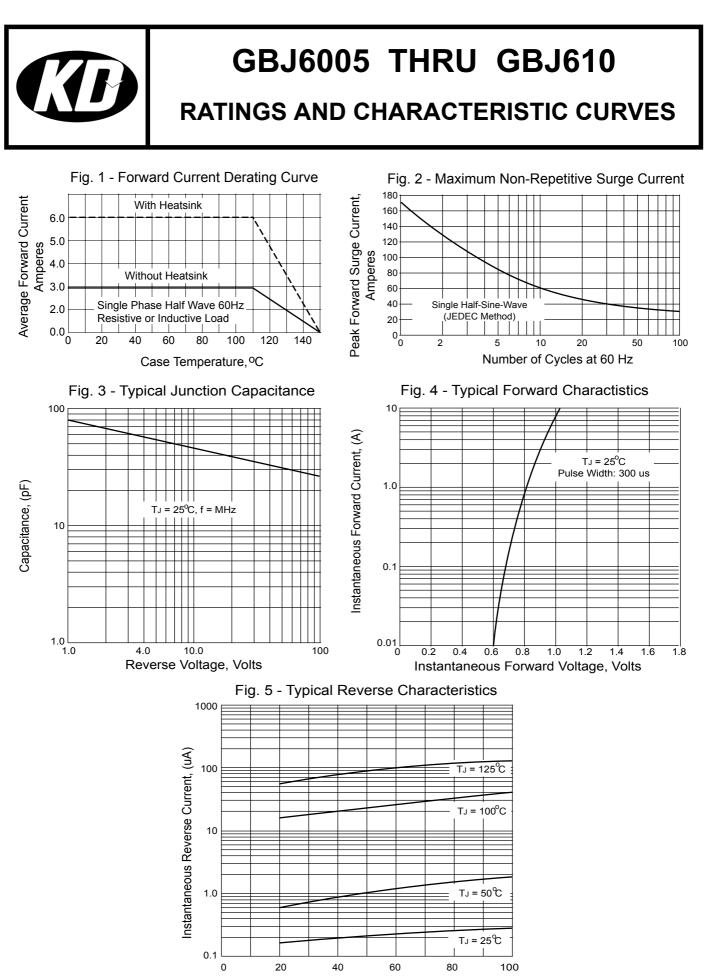
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| Parameter | Symbols | GBJ 6005 | GBJ 601 | GBJ 602 | GBJ 604 | GBJ 606 | GBJ 608 | GBJ 610 | Units |
|--|--------------------------------|-------------|------------|------------|------------|------------|------------|------------|-------|
| 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 at T_{C} = 100 °C | I _(AV) | 6 | | | | | | | А |
| Peak Forward Surge Current, 8.3 ms Single Half-Sine -Wave superimposed on rated load (JEDEC Method) | I _{FSM} | 170 | | | | | | | А |
| Maximum Forward Voltage at 3.0 A DC and 25 $^{\circ}$ C | V _F | 1.1 | | | | | | | V |
| Maximum Reverse Current at $T_A = 25^{\circ}C$ at Rated DC Blocking Voltage $T_A = 125^{\circ}C$ | I _R | 5.0 500 | | | | | | | μA |
| Typical Junction Capacitance ¹⁾ | CJ | 55 | | | | | | | pF |
| Typical Thermal Resistance ²⁾ | R _{θJC} | 1.8 | | | | | | | °C/W |
| Operating and Storage Temperature Range | T _J ,T _S | -55 to +150 | | | | | | | °C |

¹⁾ Measured at 1 MHz and applied reverse voltage of 4 VDC.

²⁾ Thermal resistance from junction to case with device mounted on 300 mm X 300 mm X 1.6 mm Cu plate heatsink.



Percent of Rate Peak Reverse Voltage, %