

**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 4.0 A**

### Features

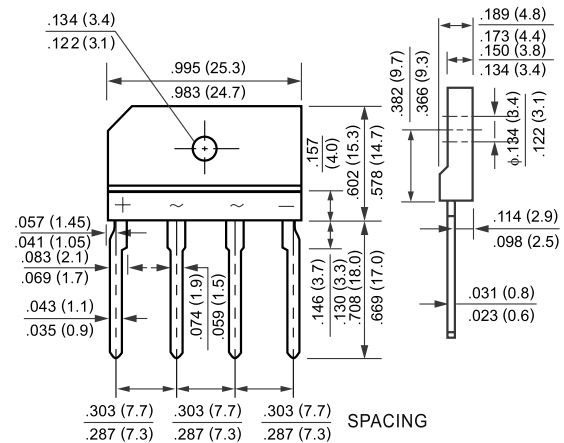
- Glass passivated chip junction
- Reliable low cost construction utilizing molded plastic technique
- Ideal for printed circuit board
- Low reverse leakage current
- Low forward voltage drop
- High surge current capability

### Mechanical Data

- Case: Molded plastic, GBJ 4
- Terminals: Terminals: Leads solderable per MIL-STD-202 method 208 guaranteed
- Epoxy: UL 94V-0 rate flame retardant
- Mounting Position: Any



**GBJ4**



**Dimensions in inches and (millimeters)**

### Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	GBJ4005	GBJ401	GBJ402	GBJ404	GBJ406	GBJ408	GBJ410	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 $T = 100^\circ\text{C}$	$I_{(AV)}$	4							A
Peak Forward Surge Current, 8.3 ms Single Half-Sine -Wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	125							A
Maximum Forward Voltage at 2.0 A DC and $25^\circ\text{C}$	$V_F$	1.1							V
Maximum Reverse Current at $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A = 125^\circ\text{C}$	$I_R$	5.0 500							$\mu\text{A}$
Typical Junction Capacitance <sup>1)</sup>	$C_J$	45							pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JC}$	2.2							C/W
Operating and Storage Temperature Range	$T_J, T_S$	-55 to +150							$^\circ\text{C}$

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.



FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

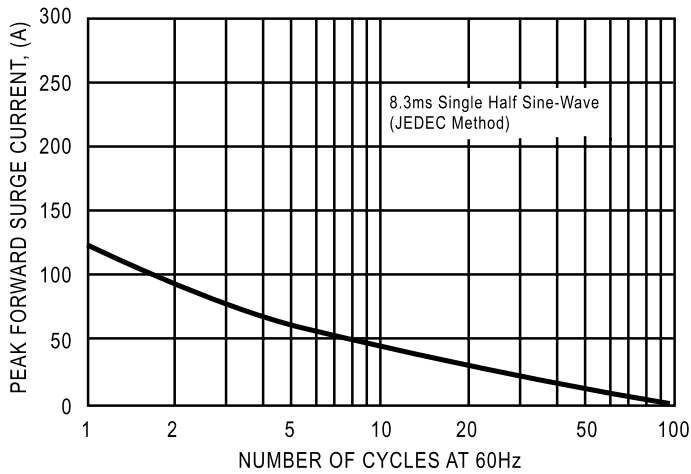


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

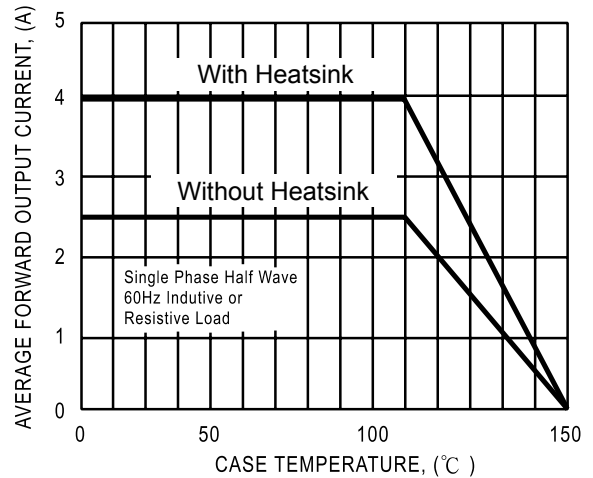


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

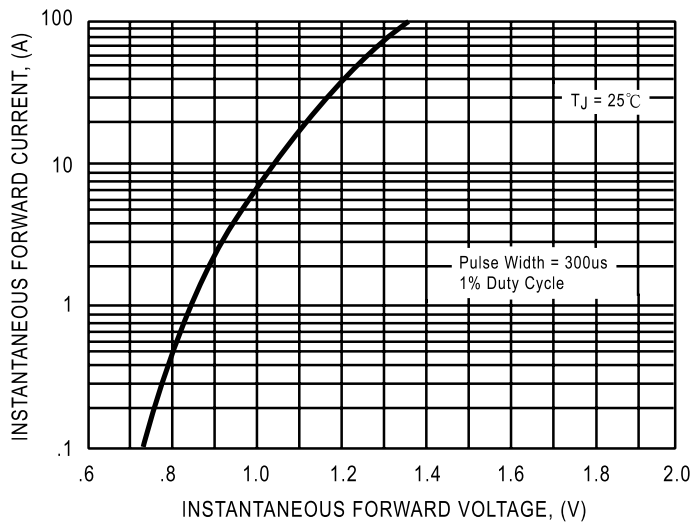


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

