

GBJ4005 THRU GBJ410

GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 4.0 Ampere

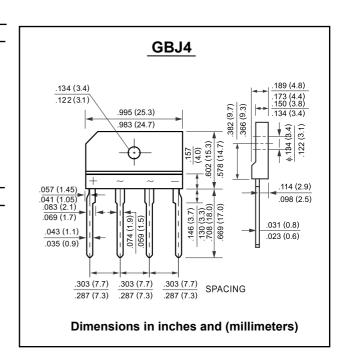
FEATURES

- 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 capability

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 4005	GBJ 401	GBJ 402	GBJ 404	GBJ 406	GBJ 408	GBJ 410	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 $T_{\rm C}$ = 100 $^{\circ}{\rm C}$	I _(AV)	4							А
Peak Forward Surge Current, 8.3 ms Single Half-Sine -Wave superimposed on rated load (JEDEC Method)	I _{FSM}	125							А
Maximum Forward Voltage at 2.0 A DC and 25 °C	V_{F}	1.1							V
Maximum Reverse Current at T _A = 25 °C at Rated DC Blocking Voltage T _A = 125 °C	I _R	5.0 500							μA
Typical Junction Capacitance 1)	CJ	45							pF
Typical Thermal Resistance 2)	$R_{\theta JC}$	2.2							°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.



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RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

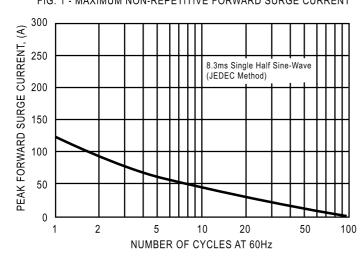


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

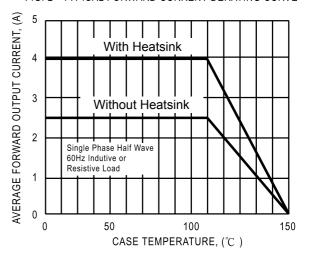


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

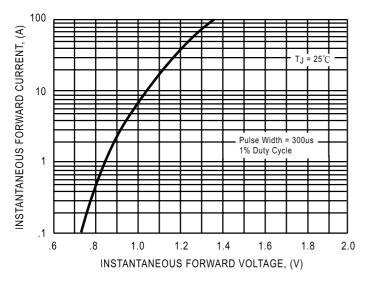


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

