

GLASS PASSIVATED BRIDGE SINGLE PHASE BRIDGE RECTIFIERS

VOLTAGE 50 to 1000 Volts
CURRENT 25 Amperes

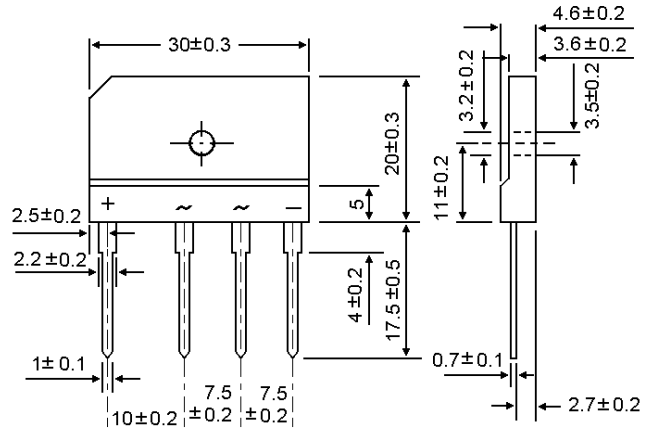
Case Style GBJ

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Glass passivated chip junction
- * High case dielectric strength of 1500 V_{RMS}
- * Ideal for printed circuit boards
- * Low Reverse Leakage Current
- * Surge Overload Rating to 350A Peak

MECHANICAL DATA

- * Case: Molded plastic body
- * Terminal: Plated leads solderable per MIL-STD-202, Method 208
- * Polarity: Molded on Body
- * Mounting :Through Hole for #6 Screw
- * Mounting Torque: 6 in-lbs max.
- * Weight: 6.6g
- * Marking:Type Number



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- * Rating at 25 ambient temperature unless otherwise specified
- * Single phase, half wave, 60Hz, resistive or inductive load.
- * For capacitive load derate current by 20 %

Characteristic	Symbo l	GBJ25005	GBJ2501	GBJ2502	GBJ2504	GBJ2506	GBJ2508	GBJ2510	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectifier Forward Current @ T _C =100	I _O	25							A
Non-Repetitive Peak Surge Current 8.3 ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	350							A
Forward Voltage (per element) (I _F =10 Amp)	V _{FM}	1.05							V
Peak Reverse Current (Rated DC Voltage, T _C = 25) (Rated DC Voltage, T _C = 125)	I _R	10 500							uA
I ² t Rating for Fusing(t<8.3 ms)	I ² t	510							A ² s
Typical Junction Capacitance per Element (note2)	C _J	60							pF
Maximum Thermal Resistance per leg(note 3)	R _{θ jc}	1.0							°C/W
Operating and Storage Temperature Range	T _J , T _{stg}	-65 to +150							

Note: NOTES:

1. Non-repetitive ,For 1>1ms and<8.3ms.
2. Measure at 1.0 Hz and applied reverse voltage of 4.0V DC.
3. Thermal resistance from junction to case per element,Unit mounted 220×220×1.6mm aluminum plate heat sink.

GBJ25005 thru GBJ2510

FIG-1 FORWARD CURRENT DERATING CURVE

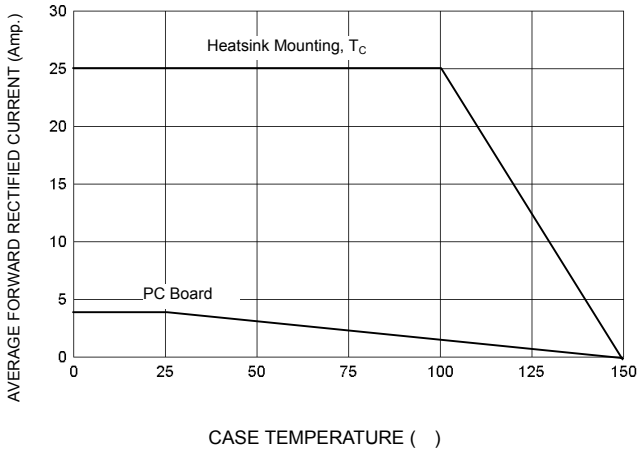


FIG-2 TYPICAL FORWARD CHARACTERISTICS

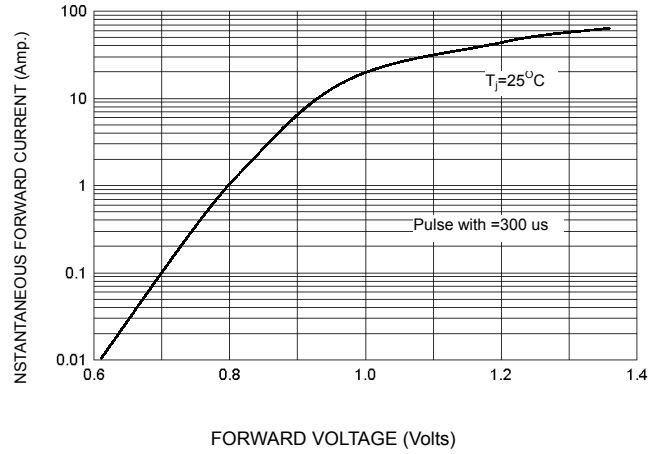


FIG-3 PEAK FORWARD SURGE CURRENT

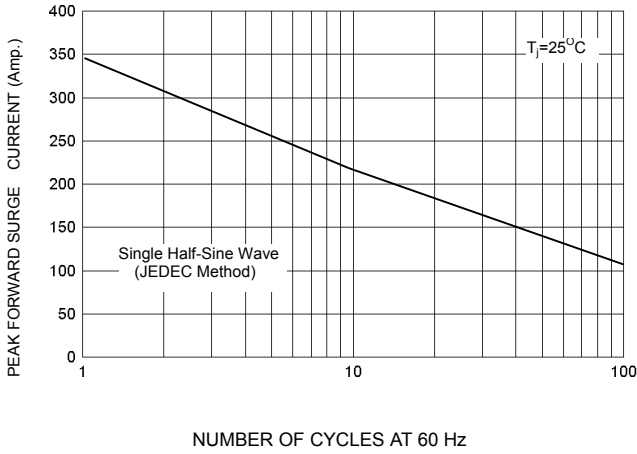


FIG-4 TYPICAL JUNCTION CAPACITANCE

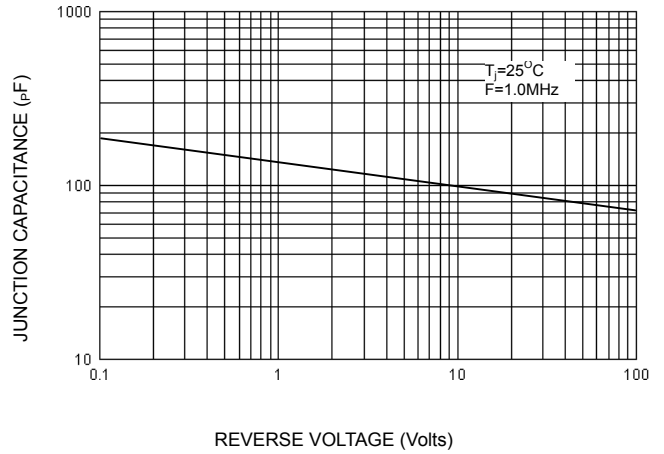


FIG-5 TYPICAL REVERSE CHARACTERISTICS Per leg

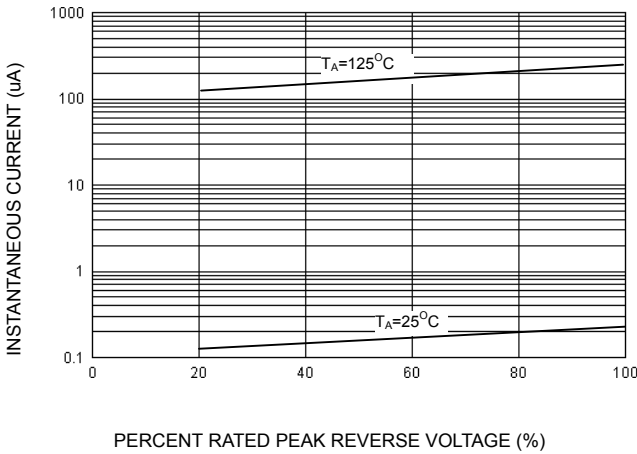
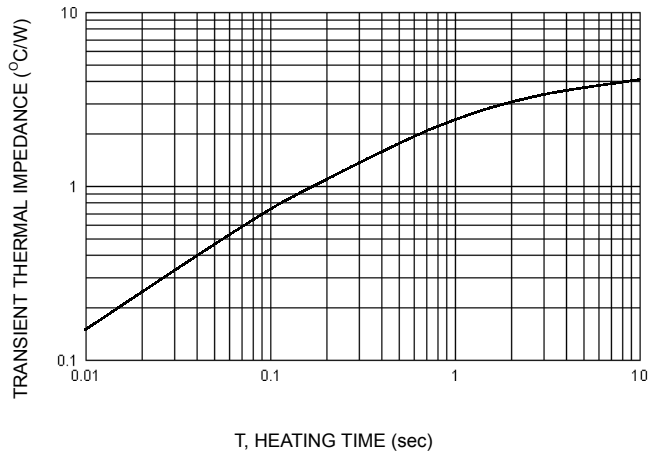


FIG-6 TYPICAL TRANSIENT THERMAL IMPEDANCE



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