

GBJL2506 Thru GBJL2510

SINGLE PHASE 25.0AMPS.GLASS PASSIVATED BRIDGE RECTIFIERS

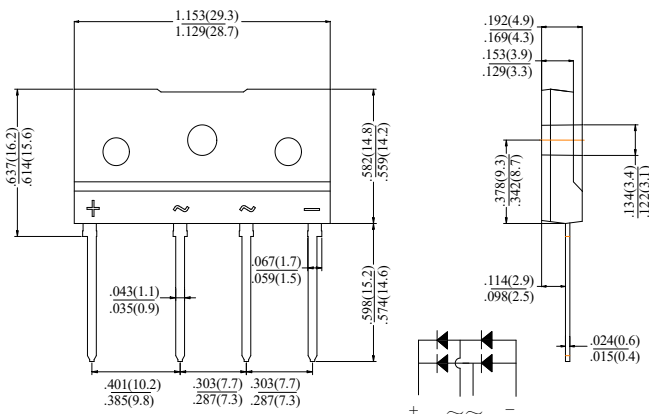
FEATURE

- . UL recognition, file #E338195
- . Glass passivated chip junctions
- . High case dielectric strength
- . Low Reverse Leakage Current
- . High surge current capability
- . Ideal for Printed Circuit Board Applications

MECHANICAL DATA

- . Case: GBJL
- . Case Material: Molded Plastic.
UL Flammability Classification Rating 94V-0
- . Terminals: Pure tin plated, Lead free.
Leads solderable per MIL-STD-750, Method 2026.
- . Polarity: Molded on Body
- . Mounting: Through Hole for #6 Screw
- . Mounting Torque: 5.0 in-lbs Maximum

GBJL



Dimensions in inches and (millimeters)

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, derate current by 20%

Type Number	SYM BOL	GBJL2506	GBJL2508	GBJL2510	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	420	560	700	V
Maximum DC blocking Voltage	V_{DC}	600	800	1000	V
Maximum Average Forward (with heatsink Note2) Rectified Current @ $T_C=100^\circ\text{C}$ (without heatsink)	$I_{F(AV)}$	25.0 3.5			A
Peak Forward Surge Current @ $T_J=25^\circ\text{C}$ 8.3ms single half sine-wave @ $T_J=125^\circ\text{C}$	I_{FSM}	350 300			A
Peak Forward Surge Current @ $T_J=25^\circ\text{C}$ 1.0ms single half sine-wave @ $T_J=125^\circ\text{C}$	I_{FSM}	700 600			A
Maximum Forward Voltage Drop per element @12.5 A DC	V_F	1.05			V
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ at rated DC blocking voltage @ $T_J=125^\circ\text{C}$	I_R	5.0 200.0			μA
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	510			A^2Sec
Typical Junction Capacitance (Note 1)	C_J	100			pF
Typical Thermal Resistance (Note 2)	$R_{(JA)}$ $R_{(JC)}$	25 0.8			$^\circ\text{C/W}$
Storage Temperature	T_{STG}	-55 to +150			$^\circ\text{C}$
Operating Junction Temperature	T_J	-55 to +150			$^\circ\text{C}$

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

Rating and Characteristic Curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

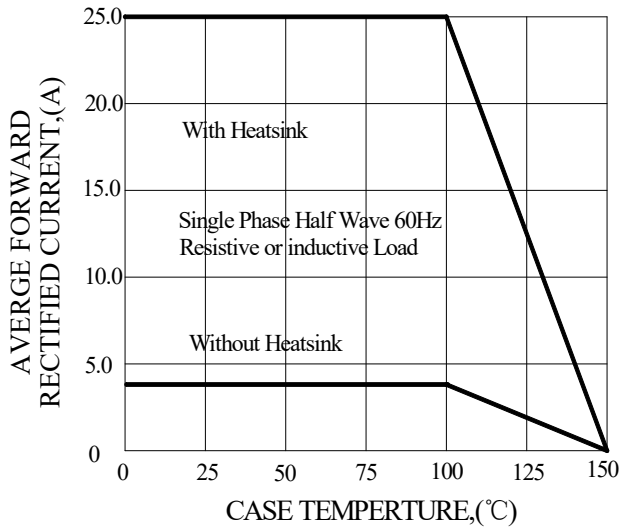


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

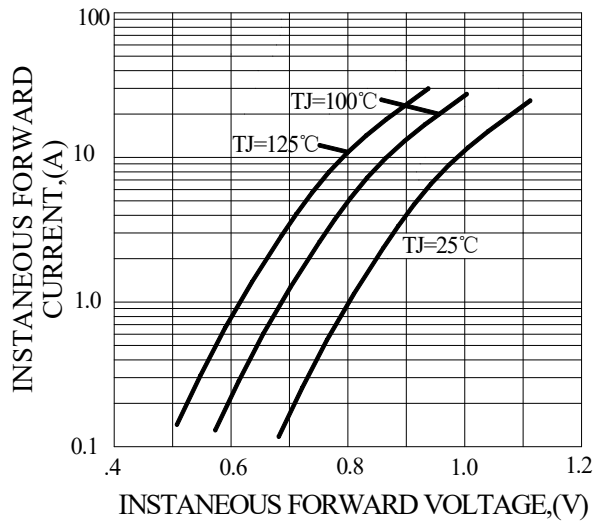


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

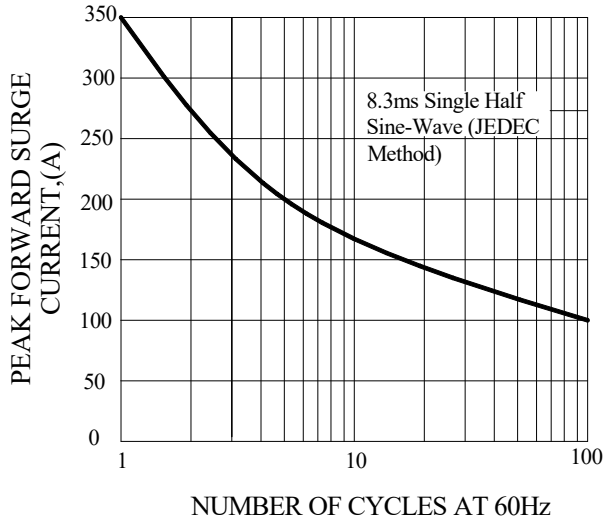


FIG.4-TYPICAL JUNCTION CAPACITANCE

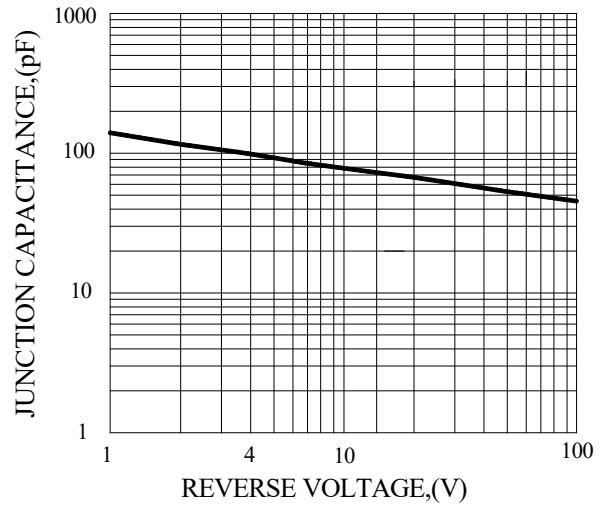
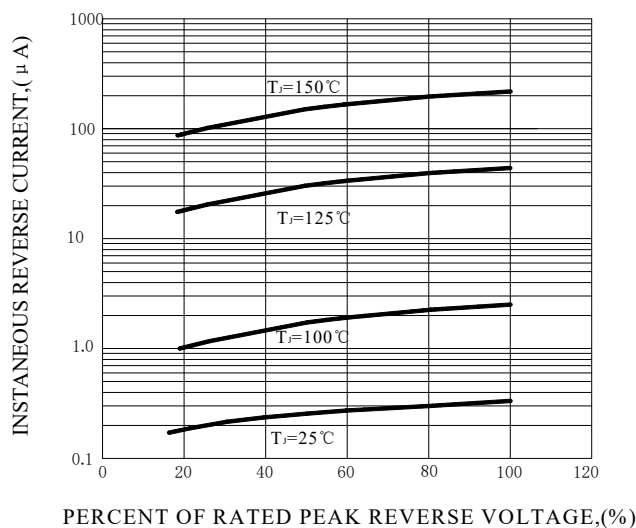
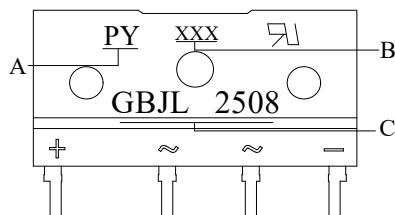


FIG.5-TYPICAL REVERSE CHARACTERISTICS



Marking and packaging illustration

1、Marking



SYMBOL	Explanation
A	Trademark
B	Date Code
C	Product Name

2、Packaging (TUBE)

Tube	
Inside Box	Carton

OUTLINE	A (mm)	B (mm)	C (mm)
Tube	485±1	33±1	7.5±1
Inner box	500±3	80±3	73±3
Carton	515±5	260±5	170±5

COUNT	TUBE (PCS)	BOX (PCS)	CARTON (PCS)
GBJ	16	320	1920