

GBJ5006 THRU GBJ5010

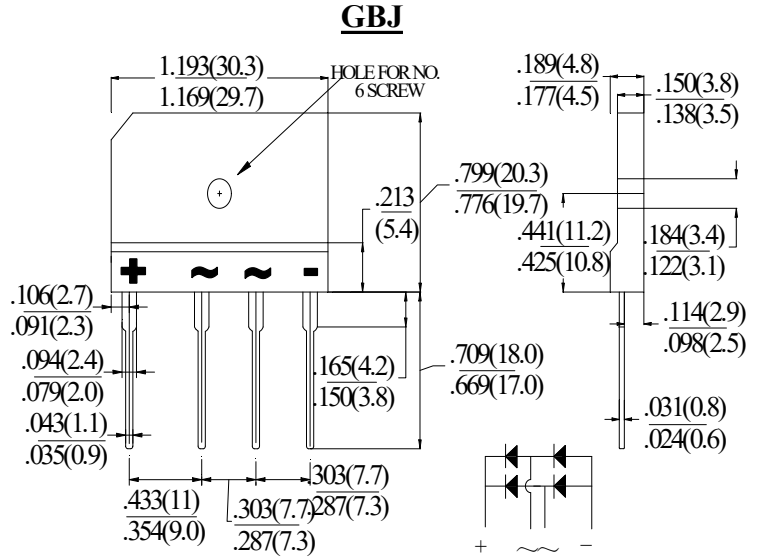
SINGLE PHASE 50.0 AMPS. GLASS PASSIVATED BRIDGE RECTIFIERS

FEATURE

- . UL Listed Under Recognized Component Index, File Number 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 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



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	GBJ5006	GBJ5008	GBJ5010	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)	$I_{F(AV)}$		50.0 5.2		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}		450		A
Maximum Forward Voltage @50.0A DC Drop per element @25.0 A DC	V_F		1.1 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		5.0 500.0		μA
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t		840		A^2Sec
Typical Junction Capacitance (Note 1)	C_J		130		pF
Typical Thermal Resistance (Note 2)	$R_{(JC)}$		1.0		$^\circ\text{C}/\text{W}$
	$R_{(JA)}$		22.0		
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 250mm x 250mm x 2.0mm Aluminum Plate Heatsink.

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

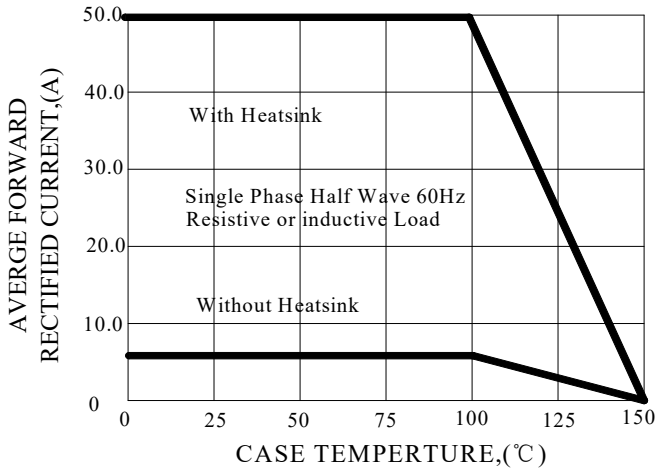


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

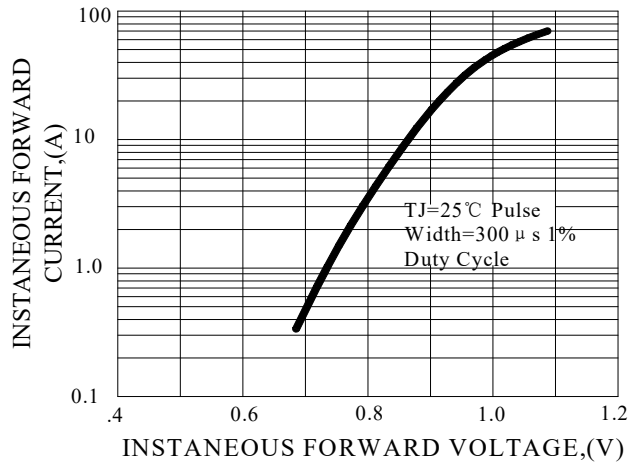


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

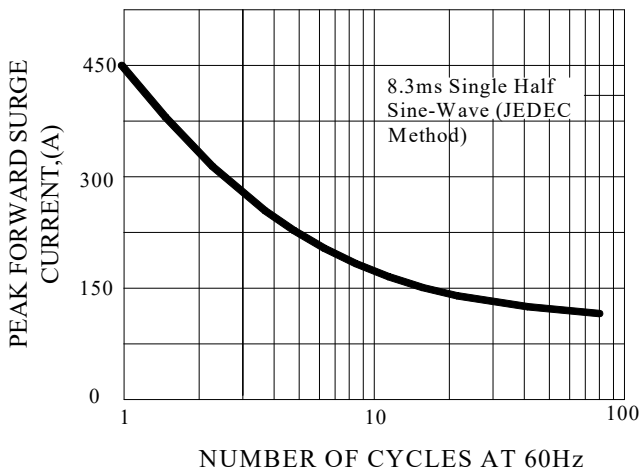


FIG.4-TYPICAL JUNCTION CAPAOTANCE

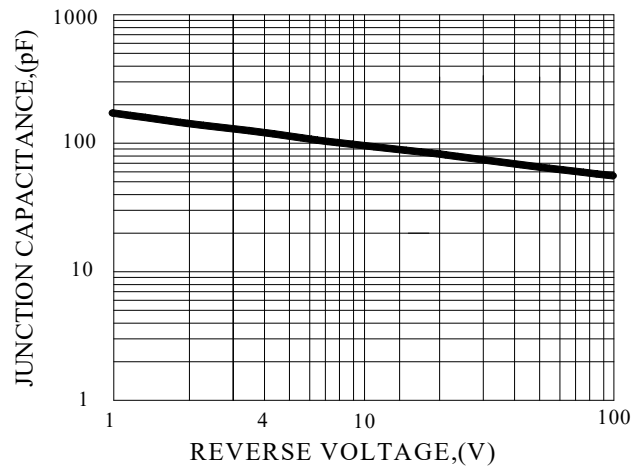
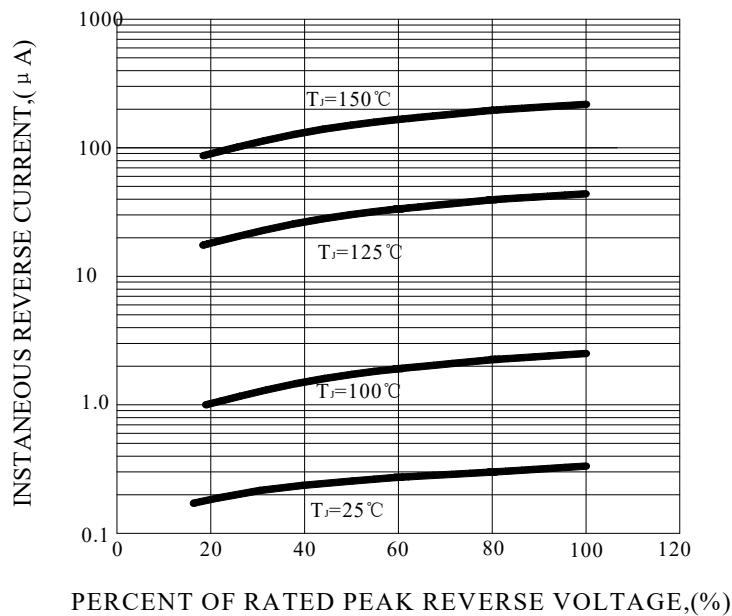
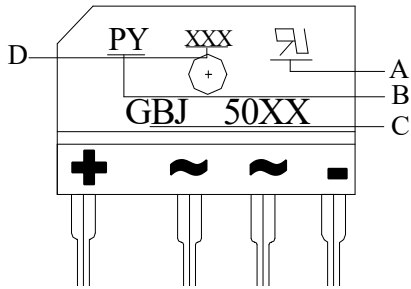


FIG.5-TYPICAL REVERSE CHARACTERISTICS



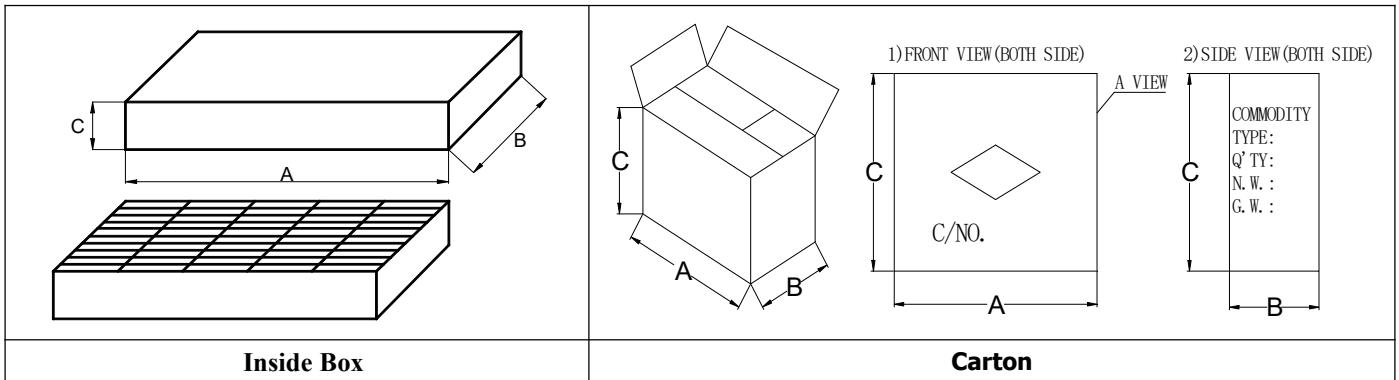
Marking and packaging illustration

1、Marking



SYMBOL	Explanation
A	UL Mark
B	Trademark
C	Product Name
D	Date Code

2、Packaging (B/P)



OUTLINE	A (mm)	B (mm)	C (mm)
Inner Box	230±3	155±3	35±3
Carton	400±5	190±5	270±5

COUNT	INSIDE BOX (PCS)	CARTON (PCS)
GBJ	200	2000