

## GBU406R THRU GBU410R

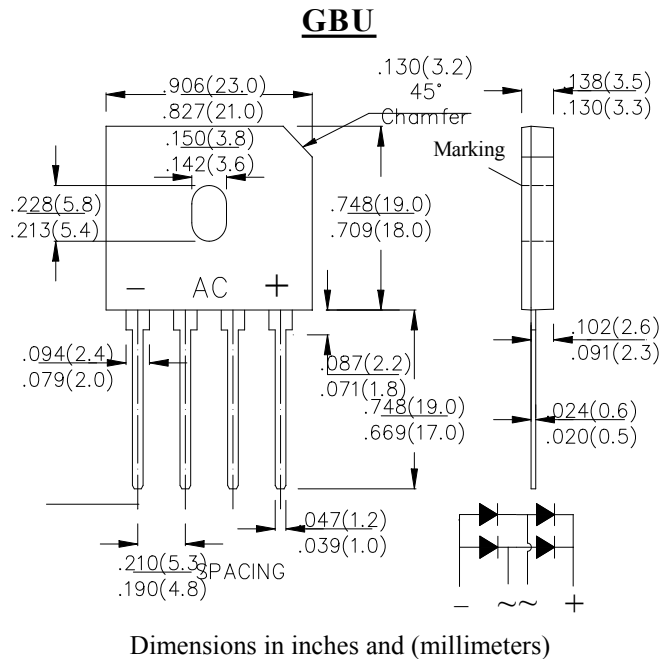
### SINGLE PHASE 4.0AMPS.GLASS PASSIVATED BRIDGE RECTIFIERS

#### 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: GBU
- . 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
- . Weight: 3.8 grams



### 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	GBU406R	GBU408R	GBU410R	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)	$I_{F(AV)}$		4.0 2.4		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$		175		A
Maximum Forward Voltage @ 4.0A DC Drop per element @ 2.0A DC	$V_F$		1.1 1.0		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		$\mu\text{A}$
$I^2t$ Rating for Fusing (t < 8.3ms)	$I^2t$		127		A <sup>2</sup> Sec
Typical Junction Capacitance (Note 1)	$C_J$		50		pF
Typical Thermal Resistance (Note 2)	$R_{(JC)}$		2.2		$^\circ\text{C}/\text{W}$
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 75mm x 75mm x 1.6mm Cu Plate Heatsink.

**RATING AND CHARACTERISTIC CURVES (GBU406R THRU GBU410R)**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

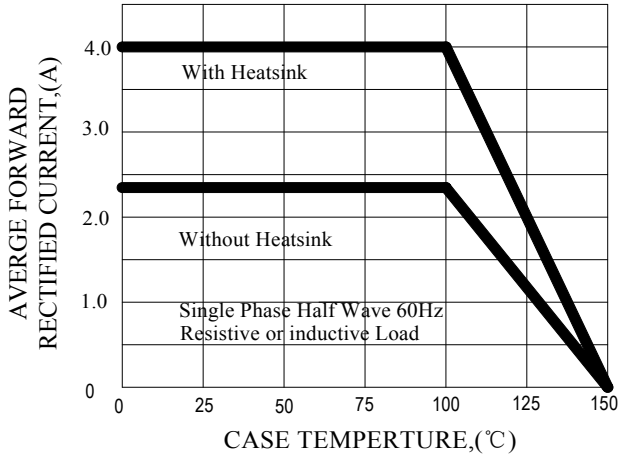


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

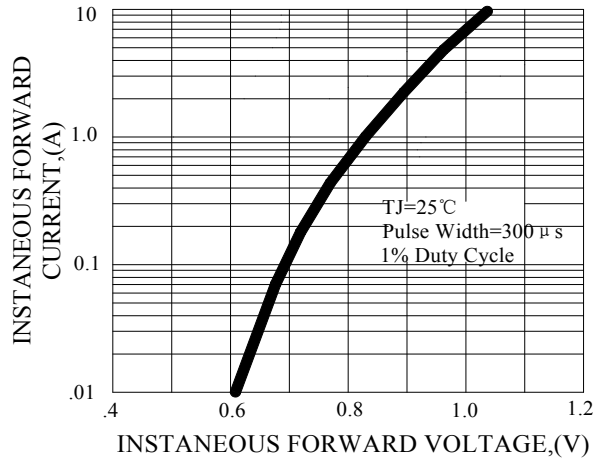


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

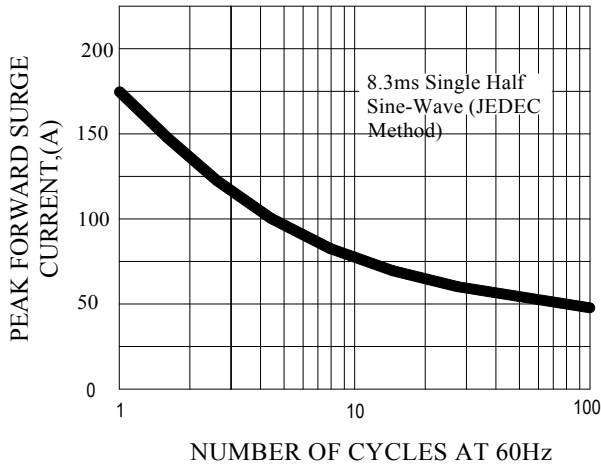


FIG.4-TYPICAL JUNCTION CAPACITANCE

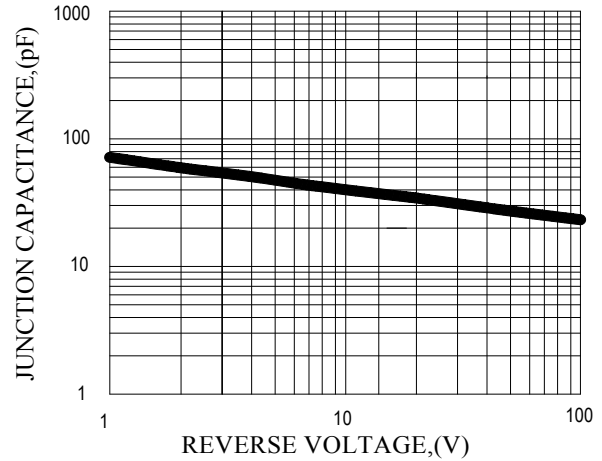
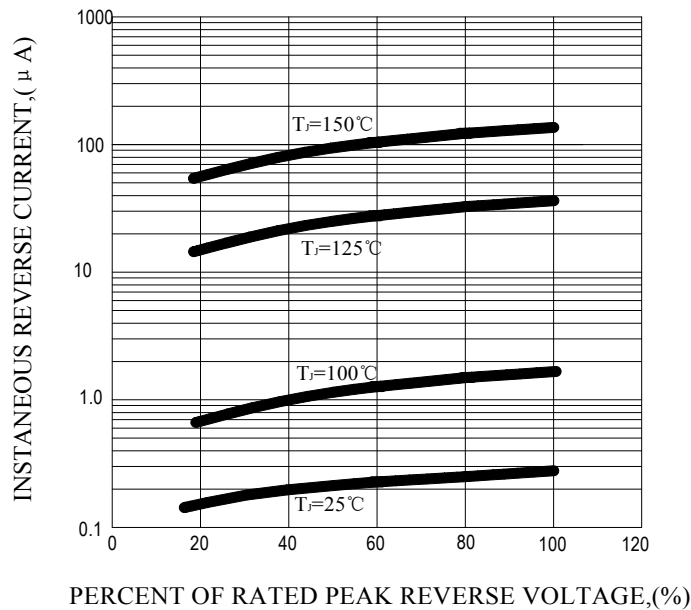
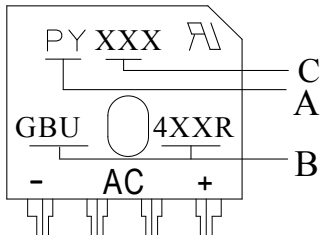


FIG.5-TYPICAL REVERSE CHARACTERISTICS



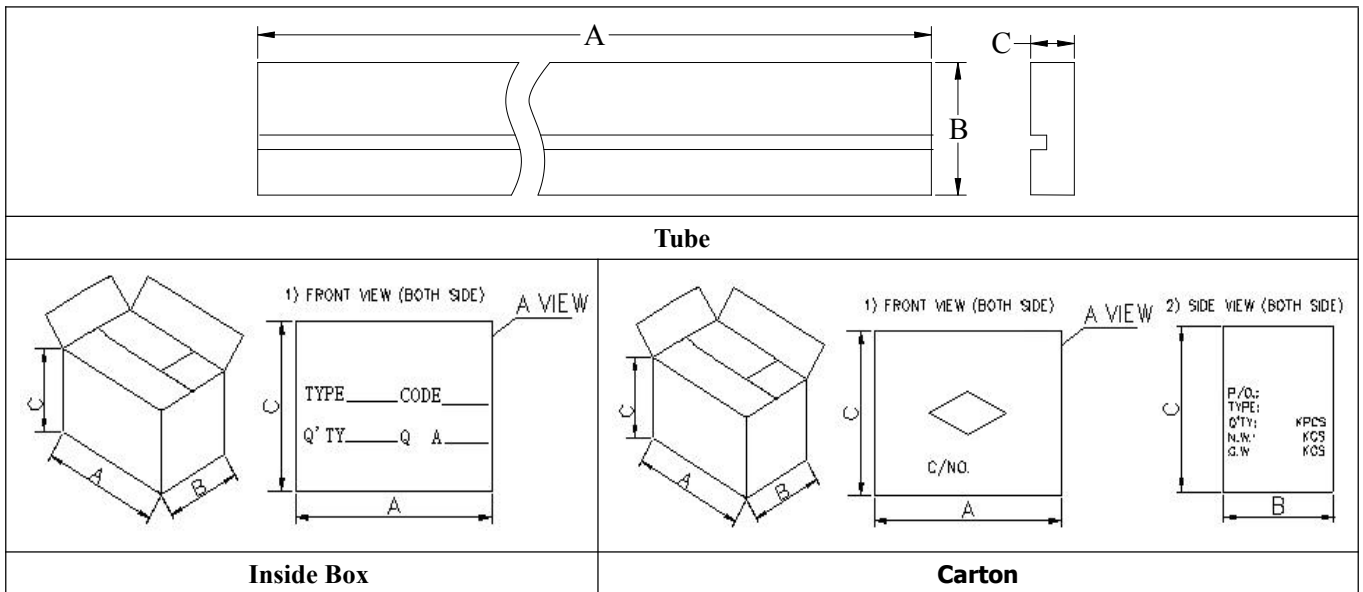
## Marking and packaging illustration

### 1、Marking



SYMBOL	Explanation
A	Trademark
B	Product Name
C	Date code

### 2、Packaging



OUTLINE	A (mm)	B (mm)	C (mm)
Tube	470±1	41±1	7.0±1
Inner box	480±3	130±3	160±3
Carton	500±5	160±5	350±5

COUNT	TUBE (PCS)	BOX (PCS)	CARTON (PCS)
GBU	20	1000	2000