

GBUR810

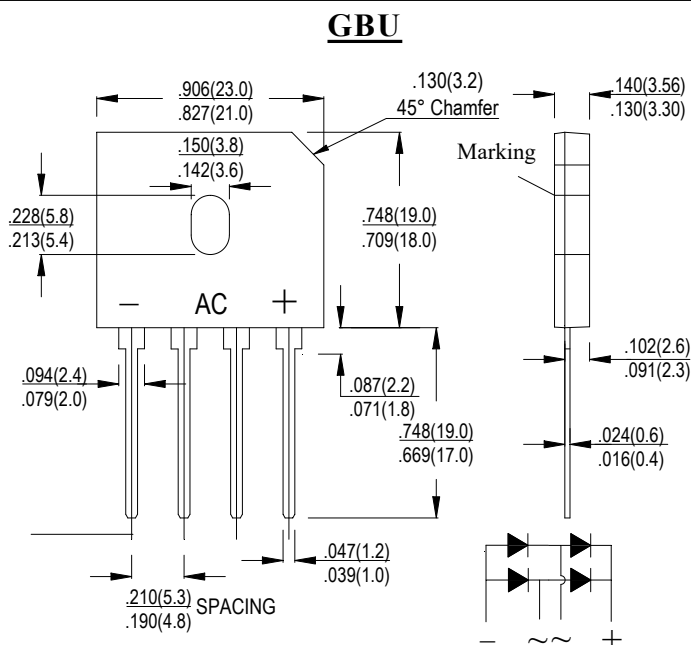
SINGLE PHASE 8.0AMPS.GLASS PASSIVATED FAST RECOVERY BRIDGE RECTIFIERS

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



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	GBUR810	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS Voltage	V_{RMS}	700	V
Maximum DC blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Rectified Current @ $T_C=100^\circ\text{C}$	$I_{F(AV)}$	8.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	170	A
Maximum Forward Voltage at 8.0A DC Drop per element	V_F	1.3	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	120	A^2Sec
Maximum Reverse Recovery Time (Note 1)	t_{rr}	500	nS
Typical Junction Capacitance (Note 2)	C_J	50	pF
Typical Thermal Resistance (Note 3)	$R_{(JC)}$	2.2	$^\circ\text{C/W}$
Storage Temperature	T_{STG}	-55 to +150	$^\circ\text{C}$
Operating Junction Temperature	T_J	-55 to +150	$^\circ\text{C}$

Note: 1. Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$; 2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc; 3. Device mounted on 100mm x 100mm x 1.6mm Cu Plate Heatsink.

RATING AND CHARACTERISTIC CURVES (GBUR810)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

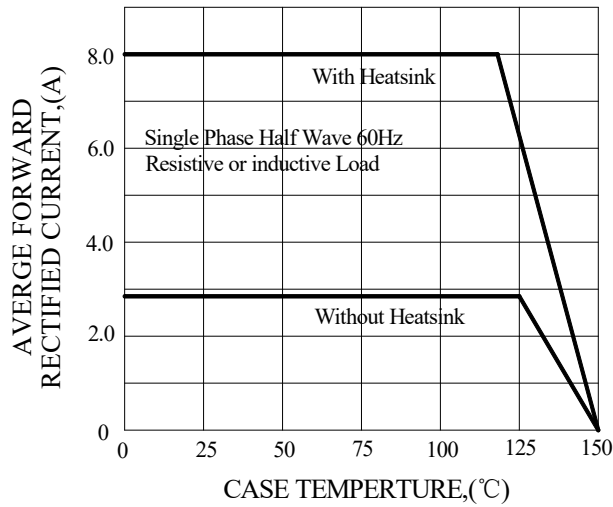


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

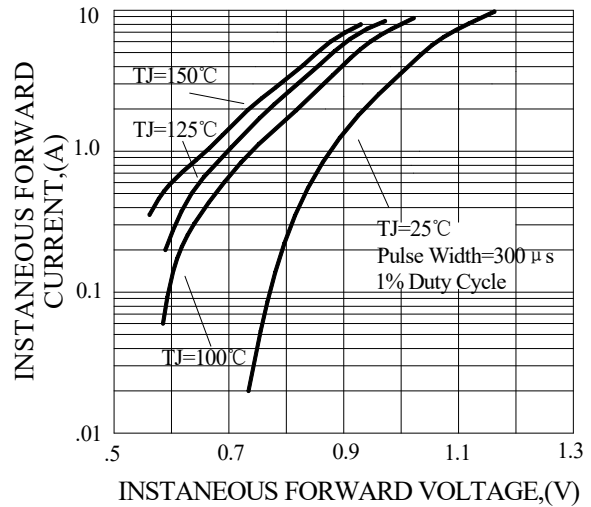


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

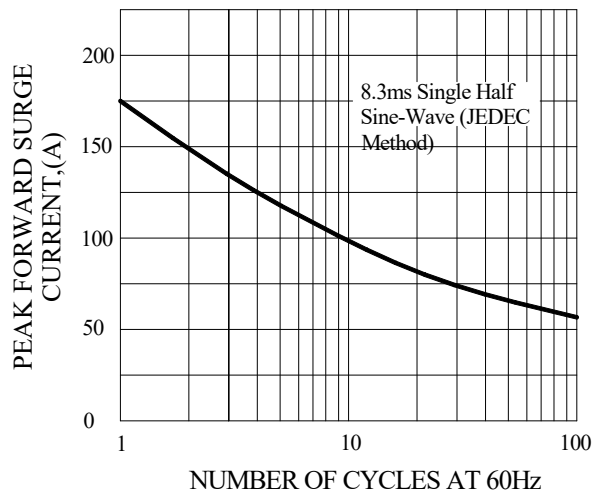


FIG.4-TYPICAL JUNCTION CAPACITANCE

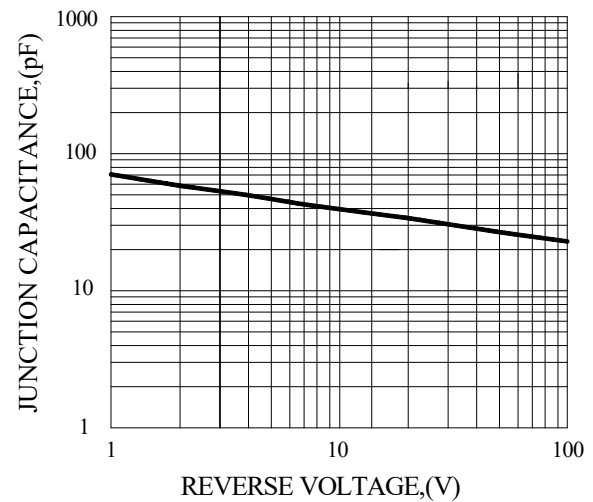


FIG.5-TYPICAL REVERSE CHARACTERISTICS

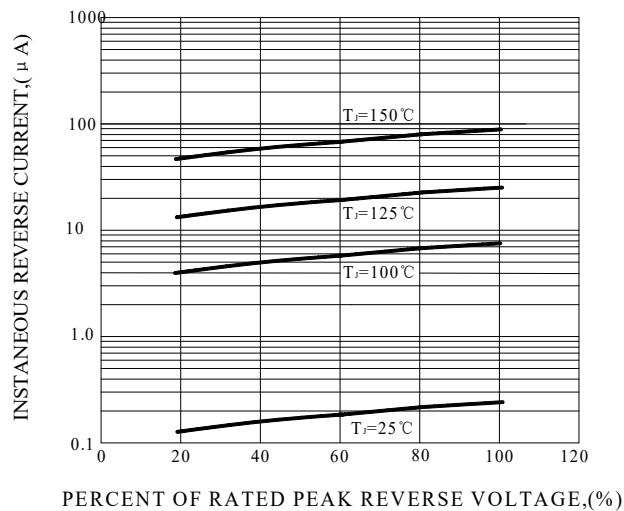
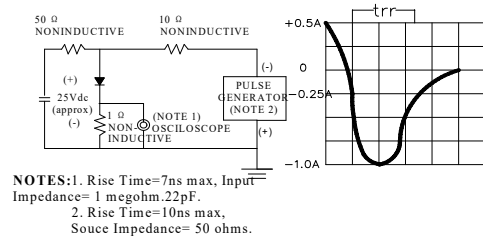
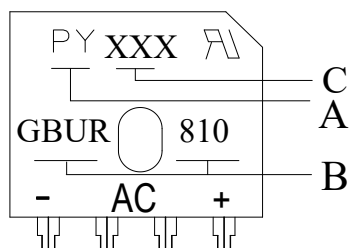


FIG.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



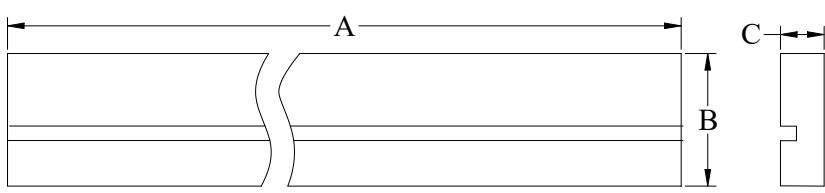
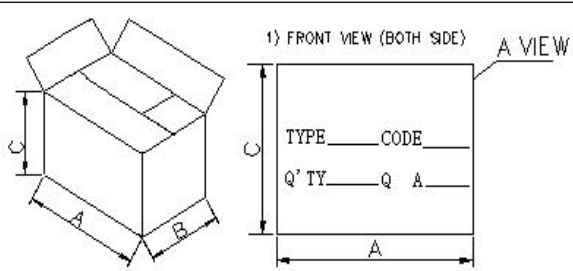
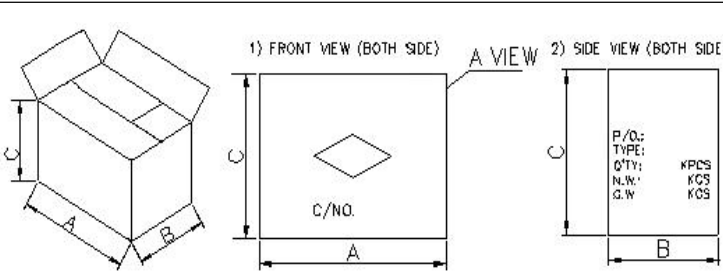
Marking and packaging illustration

1、Marking



SYMBOL	Explanation
A	Trademark
B	Product Name
C	Date code

2、Packaging

		
Tube		
		
Inside Box	Carton	

OUTLINE	A (mm)	B (mm)	C (mm)
Tube	470±1	41±1	7.0±1
Inner box	485±3	130±3	130±3
Carton	500±5	285±5	150±5

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