

GBUR1010

SINGLE PHASE 10.0AMPS.GLASS PASSIVATED FAST RECOVERY BRIDGE RECTIFIERS

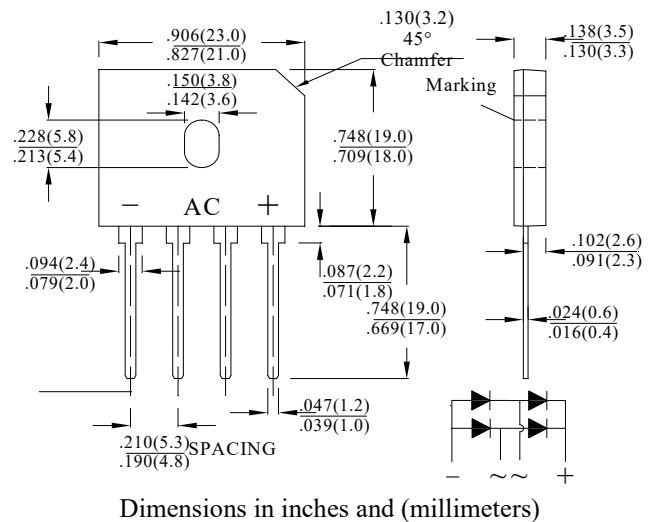
FEATURE

- . Fast switching
- . 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 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

GBU



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	SYMBOL	GBUR1010	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 (with heatsink Note2) Rectified Current @ $T_C=100^{\circ}C$ (without heatsink)	$I_{F(AV)}$	10.0 3.4	A
Peak Forward Surge Current @ $T_J=25^{\circ}C$ 8.3ms single half sine-wave @ $T_J=125^{\circ}C$	I_{FSM}	200 180	A
Peak Forward Surge Current @ $T_J=25^{\circ}C$ 1.0ms single half sine-wave @ $T_J=125^{\circ}C$	I_{FSM}	400 330	A
Maximum Forward Voltage @ 10.0A DC Drop per element @ 5.0A DC	V_F	1.3 1.2	V
Maximum DC Reverse Current @ $T_J=25^{\circ}C$ at rated DC blocking voltage @ $T_J=125^{\circ}C$	I_R	5.0 500.0	μA
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	200	A ² Sec
Maximum Reverse Recovery Time (Note 1)	t_{rr}	500	nS
Typical Junction Capacitance (Note 2)	C_J	60	pF
Typical Thermal Resistance (Note 3)	$R_{(JA)}$ $R_{(JC)}$	21 2.2	$^{\circ}C/W$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}C$
Operating Junction Temperature	T_J	-55 to +150	$^{\circ}C$

Note: 1. Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$

2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc

3. Device mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

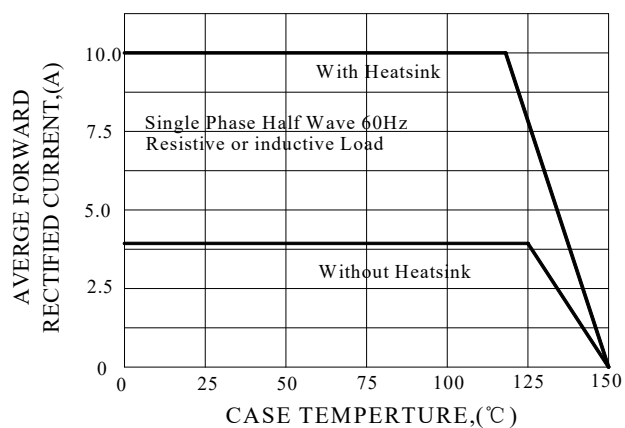


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

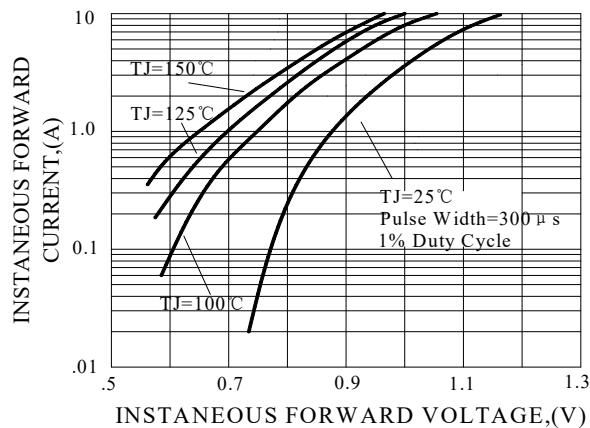


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

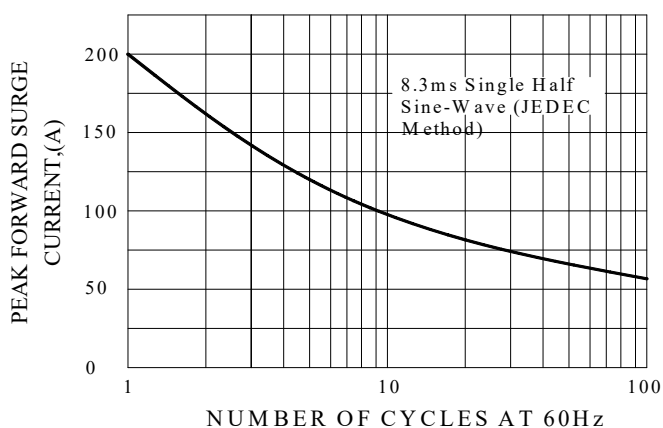


FIG.4-TYPICAL JUNCTION CAPACITANCE

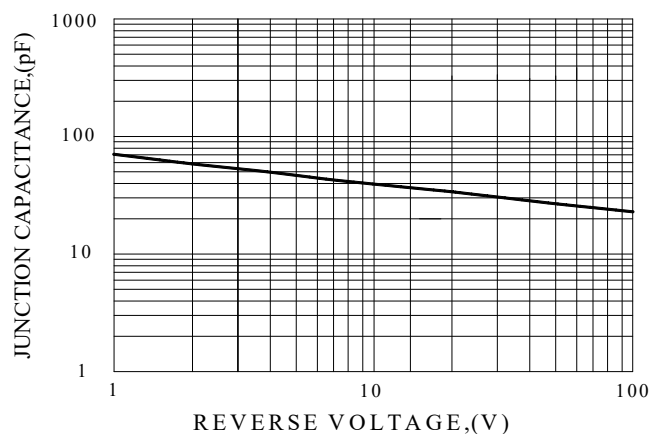


FIG.5-TYPICAL REVERSE CHARACTERISTICS

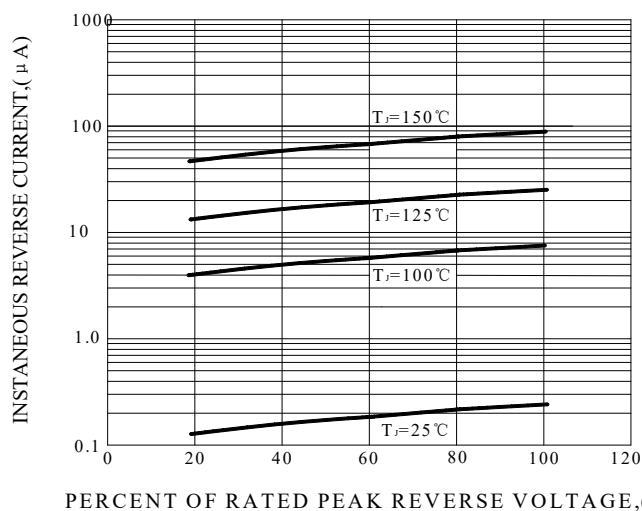
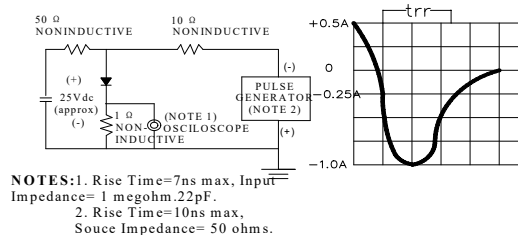
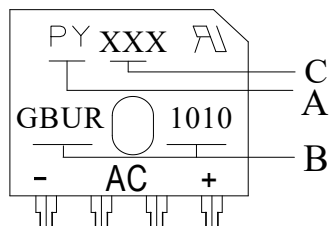


FIG.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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