

GBUR1510

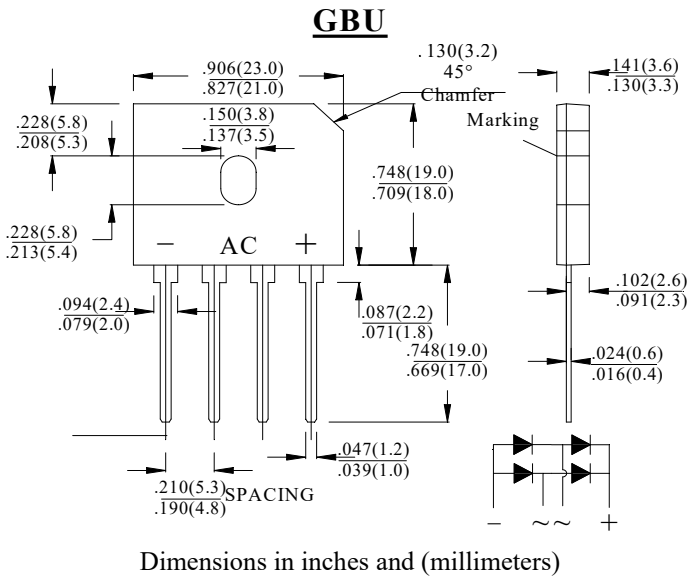
SINGLE PHASE 15.0AMPS..FAST RECOVERY BRIDGE RECTIFIERS

FEATURE

- . 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



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	GBUR1510	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 @ $T_C=100^{\circ}C$ (with heatsink)	$I_{F(AV)}$	15.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	200	A
Maximum Forward Voltage Drop per element @7.5 A DC	V_F	1.3	V
Maximum DC Reverse Current @ $T_J=25^{\circ}C$ at rated DC blocking voltage @ $T_J=125^{\circ}C$	I_R	10.0 500.0	μA
I^2t Rating for Fusing ($t < 8.3ms$)	Pt	166	A^2Sec
Maximum Reverse Recovery Time (Note 1)	t_{rr}	500	ns
Typical Junction Capacitance (Note 2)	C_J	80	pF
Typical Thermal Resistance (Note 3)	$R_{(JC)}$	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: $I_F=0.5A$, $I_R=1.0A$, $IRR=0.25A$;
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc;
3. Device mounted on 150mm x 150mm x 1.6mm Cu Plate Heatsink.

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

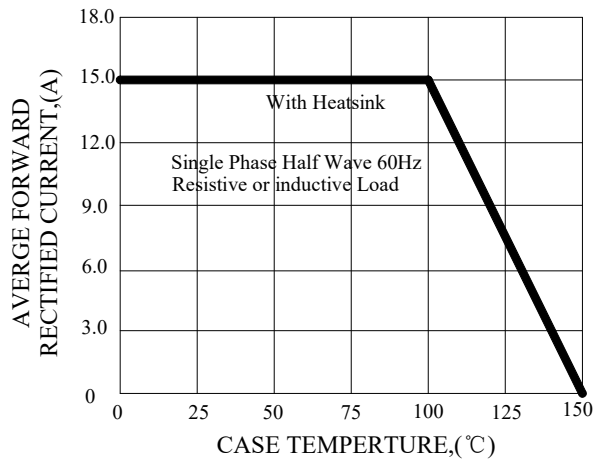


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

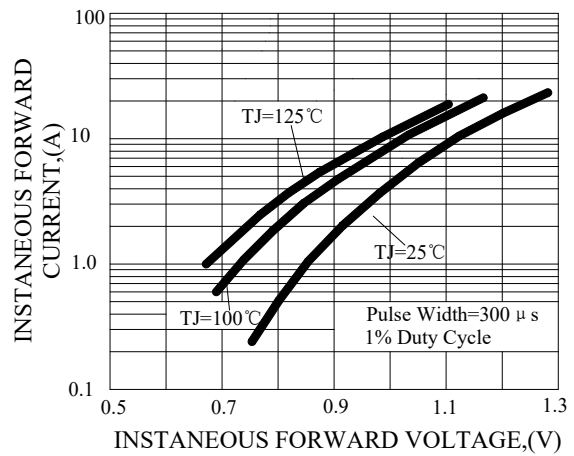


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

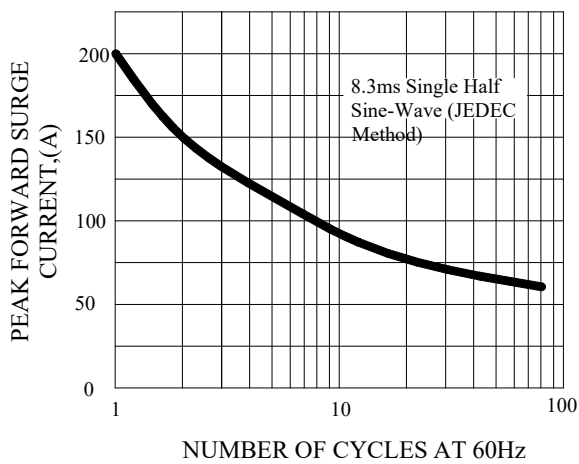


FIG.4-TYPICAL JUNCTION CAPACITANCE

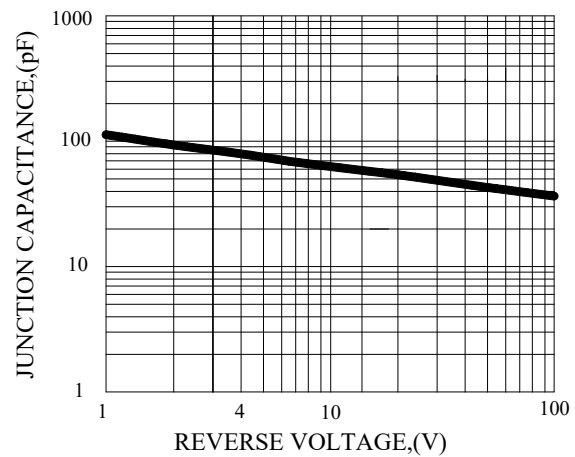


FIG.5-TYPICAL REVERSE CHARACTERISTICS

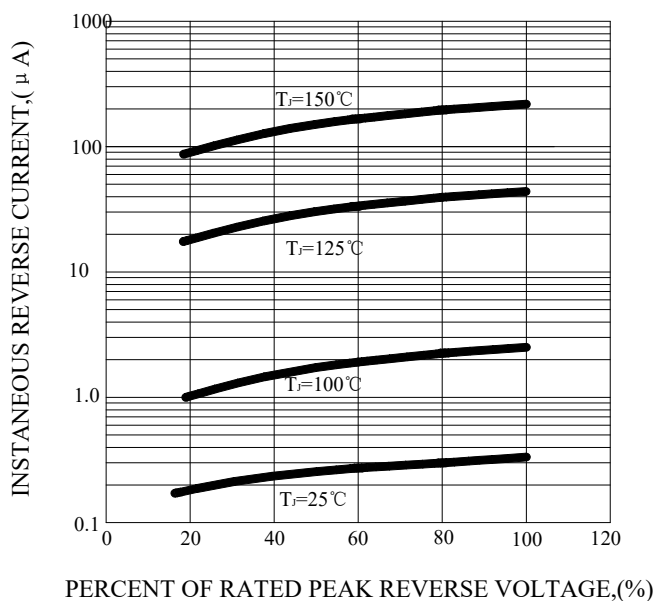
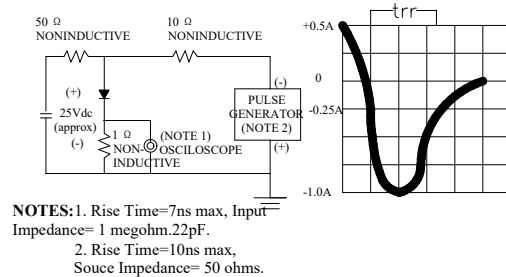
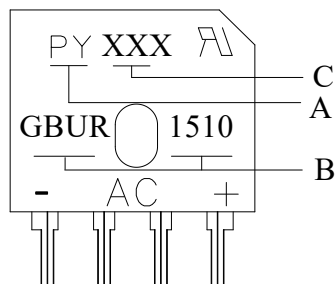


FIG.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



Marking and packaging illustration

1、Marking



SYMBOL	Explanation
A	Trademark
B	Product Name
C	Date code

2、Packaging

Tube			
	1) FRONT VIEW (BOTH SIDE) 		1) FRONT VIEW (BOTH SIDE)
Inside Box		Carton	
		2) SIDE VIEW (BOTH SIDE) 	

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