

GBU1508P

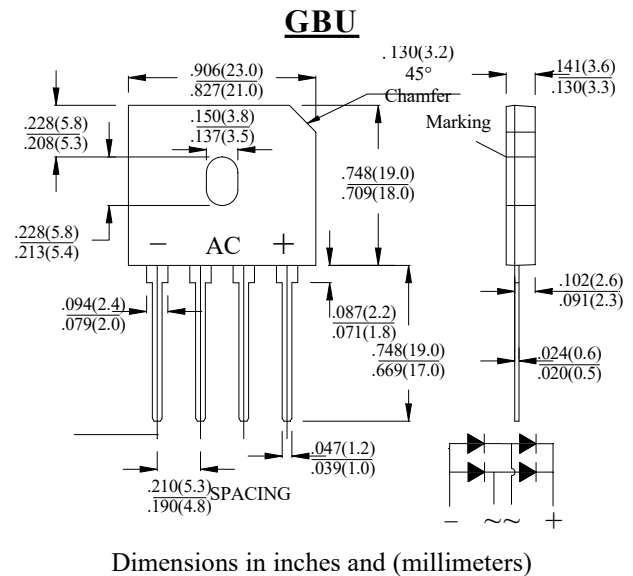
SINGLE PHASE 15.0AMPS.LOW VF BRIDGE RECTIFIERS

FEATURE

- . Low forward drop enhance the efficiency
- . 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	GBU1508P		units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	800		V
Maximum RMS Voltage	V_{RMS}	560		V
Maximum DC blocking Voltage	V_{DC}	800		V
Maximum Average Forward (with heatsink Note2) Rectified Current @ $T_C=100^{\circ}C$ (without heatsink)	$I_{F(AV)}$	15.0 3.2		A
Peak Forward Surge Current @ $T_J=25^{\circ}C$ 8.3ms single half sine-wave @ $T_J=125^{\circ}C$	I_{FSM}	240 200		A
Peak Forward Surge Current @ $T_J=25^{\circ}C$ 1.0ms single half sine-wave @ $T_J=125^{\circ}C$	I_{FSM}	480 400		A
Maximum Forward Voltage Drop per element @ 7.5A DC	V_F	Typ 0.90	Max 0.95	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	239		A ² Sec
Maximum Reverse Recovery Time (Note 1)	t_{rr}	500		nS
Typical Junction Capacitance (Note 2)	C_J	200		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: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Device mounted on 200mm x 200mm x 2.0mm Cu Plate Heatsink.

Rating and Characteristic Curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

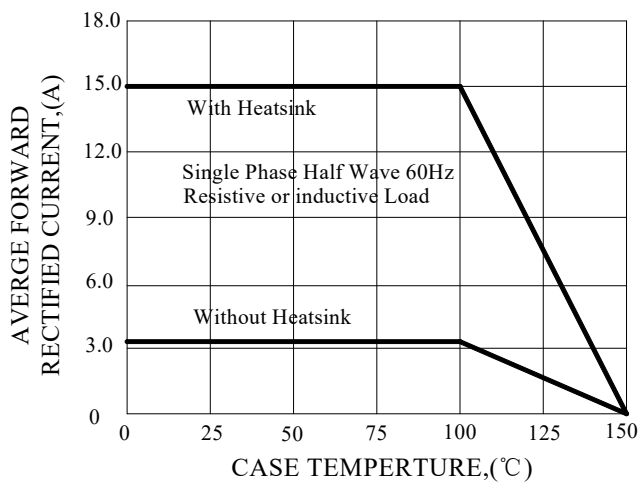


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

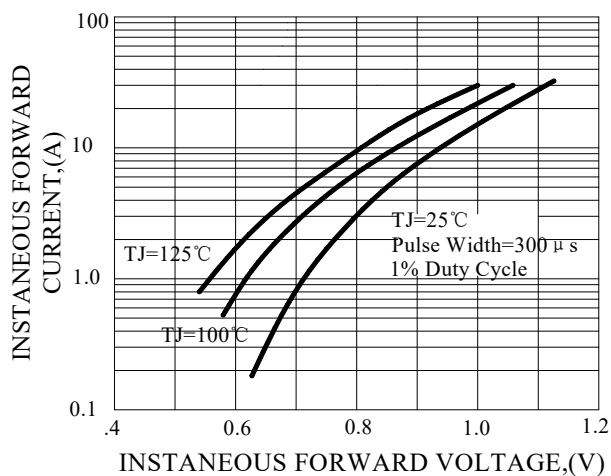


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

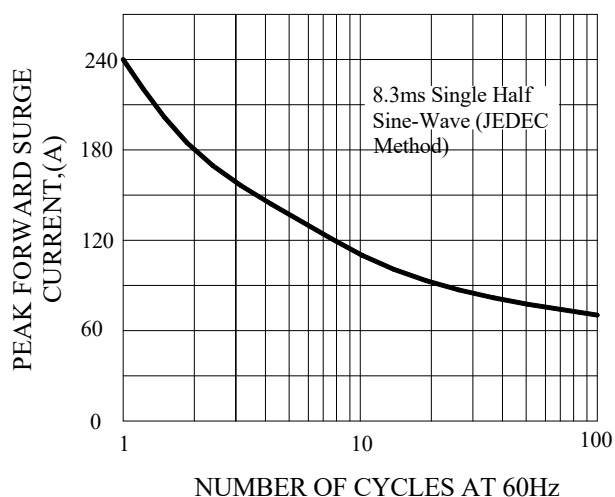


FIG.4-TYPIAL JUNCTION CAPACITANCE

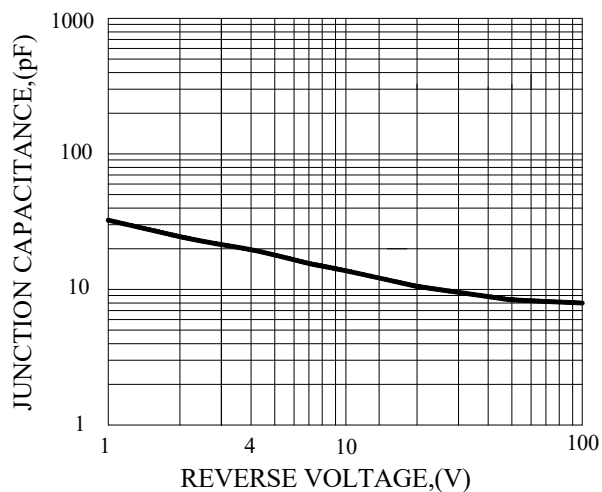
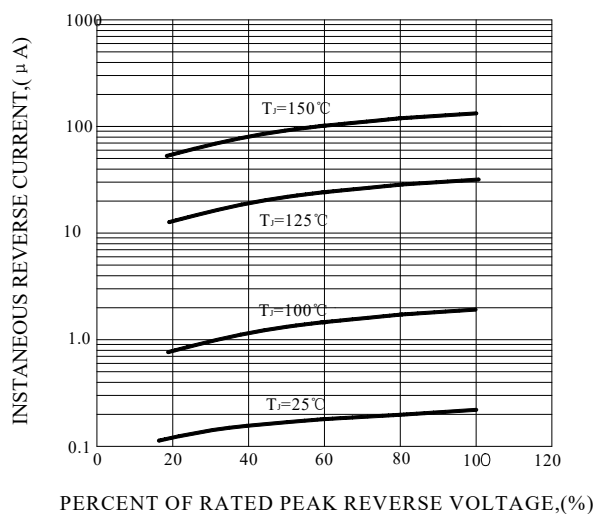
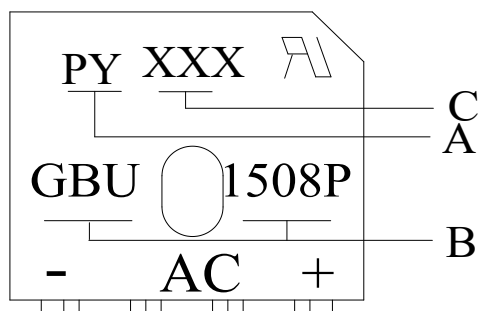


FIG.5-TYPICAL REVERSE CHARACTERISTICS



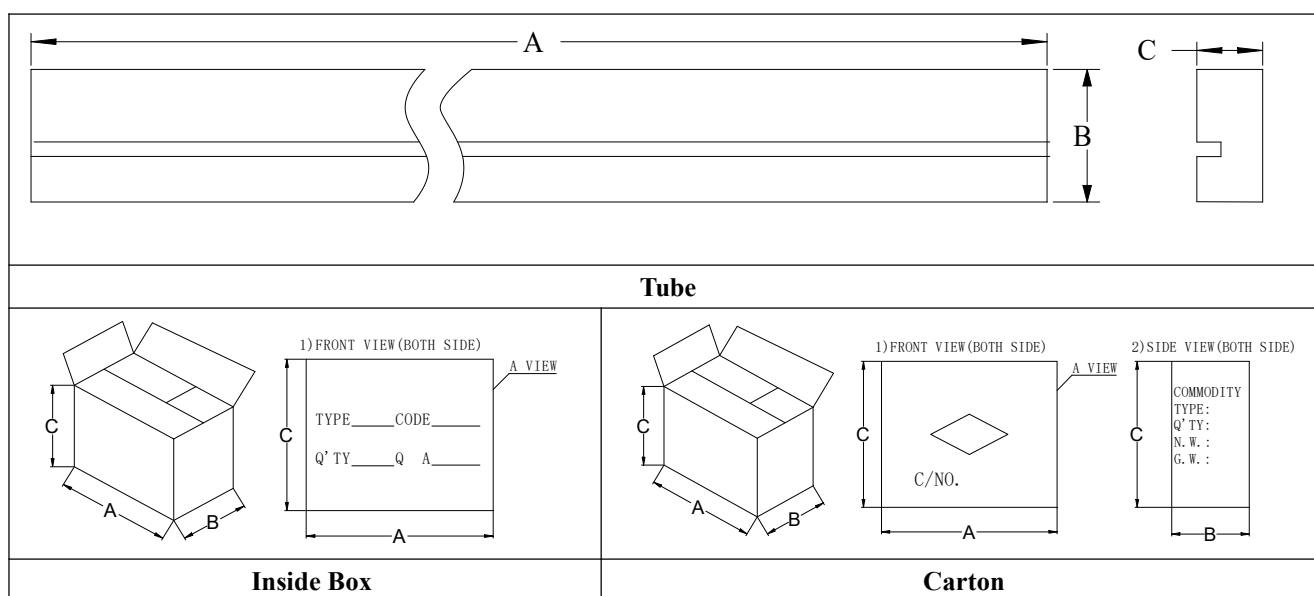
Marking and packaging illustration

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	485±3	130±3	130±3
Carton	500±5	285±5	150±5
COUNT	TUBE (PCS)	BOX (PCS)	CARTON (PCS)
GBU	20	1000	2000