

## **GBU10005 THRU GBU1010**

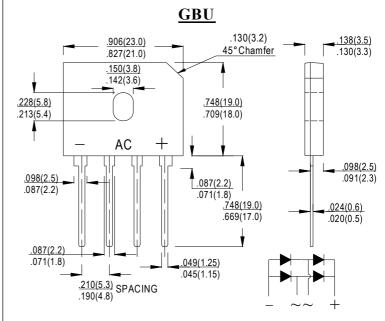
### SINGLE PHASE10.0AMPS.GLASS PASSIVATED BRIDGE RECTIFIERS

#### **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



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	GBU 10005	GBU 1001	GBU 1002	GBU 1004	GBU 1006	GBU 1008	GBU 1010	units
Maximum Recurrent Peak Reverse Voltage		$V_{ m RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage		$V_{ m RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage		$V_{ m DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note2)		7	10.0							A
Rectified Current @ T <sub>C</sub> =100°C(without heatsink)		$I_{\text{F(AV)}}$	3.0							
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC		$I_{ m FSM}$	<i>I</i> FSM 220							
method)		1FSM	220							A
Maximum Forward Voltage	@ 10.0A DC	$V_{ m F}$	1.1							V
Drop per element	@ 5.0A DC	V F	1.0							
Maximum DC Reverse Current	@ $T_J = 25$ °C	7	5.0							μΑ
at rated DC blocking voltage	@ $T_J = 125$ °C	$I_{ m R}$	500.0							
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)		<i>I</i> <sup>2</sup> t	200							A <sup>2</sup> Sec
Typical Junction Capacitance (Note 1)		$C_{ m J}$	68							pF
Typical Thermal Resistance (Note 2)		$R_{(JC)}$	2.0							°C/W
Storage Temperature		$T_{ m STG}$	-55 to +150							°C
Operating Junction Temperature		$T_{ m J}$	-55 to +150							°C

#### Note:

- 1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- 2.Device mounted on 150mm x 150mm x 1.6mm Cu Plate Heatsink.

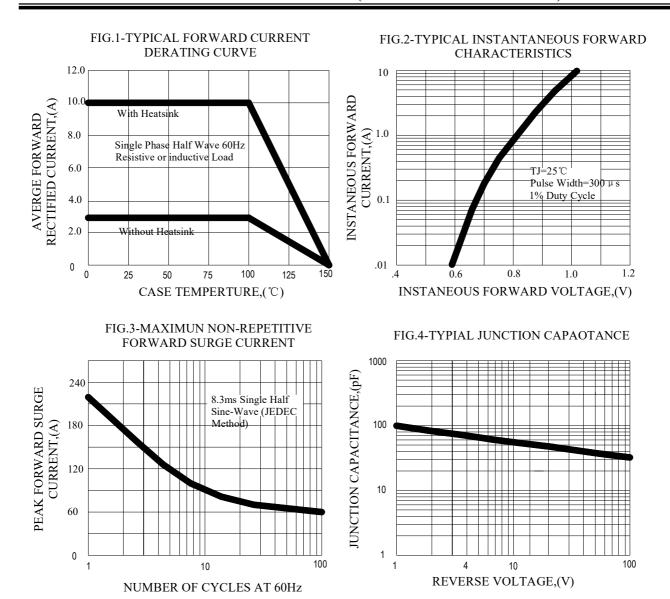
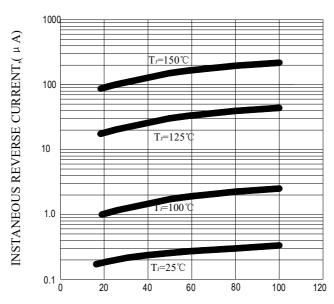


FIG.5-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE,(%)