

GBU8005 THRU GBU810

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 8.0 Ampere

FEATURES

- ◆ Rating to 1000V PRV
- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic

Technique

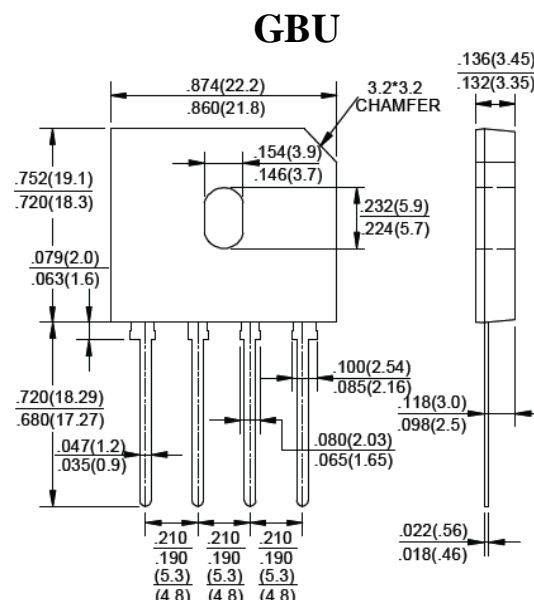
- ◆ The plastic material has UL flammability

classification 94V-0

- ◆ Electrically isolated base-1500 Volts

Mechanical Data

- ◆ Polarity : Symbols molded on body
- ◆ Weight : 0.15 ounces, 4.0 grams
- ◆ Mounting position : Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBU 8005	GBU 801	GBU 802	GBU 804	GBU 806	GBU 808	GBU 810	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2) Rectified Current, @ $T_C=100^{\circ}\text{C}$ (without heatsink)	$I_{(AV)}$	8.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	200							A
Maximum Forward Voltage at 4.0A DC	V_F	1.0							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							μA
I^2t Rating for fusing ($t < 8.3\text{ms}$)	I^2t	166							A^2S
Typical Junction Capacitance per element (Note 1)	C_J	60							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.2							$^{\circ}\text{C}/\text{W}$
Operating Temperature Range	T_J	-55 to +150							$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^{\circ}\text{C}$

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

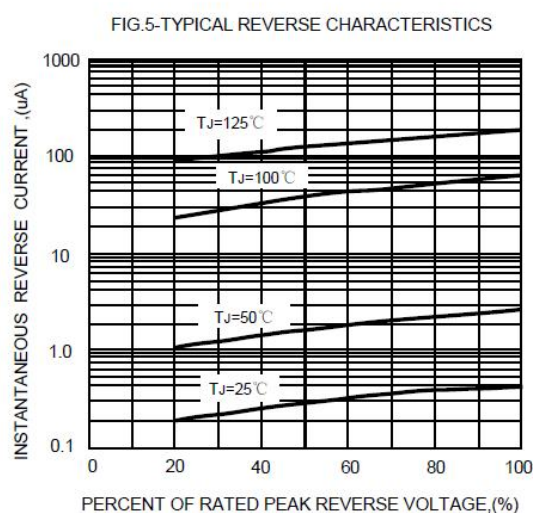
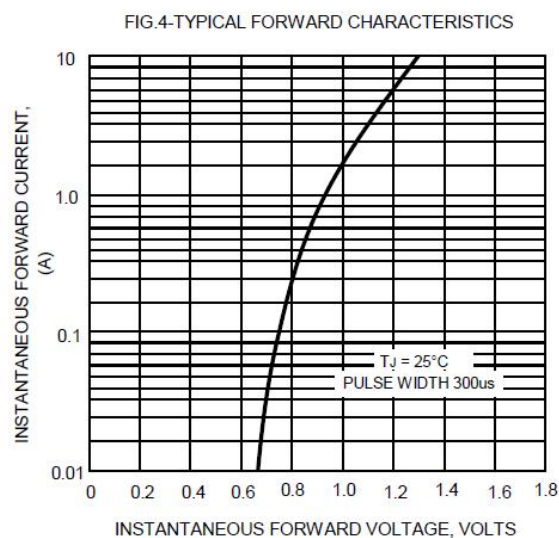
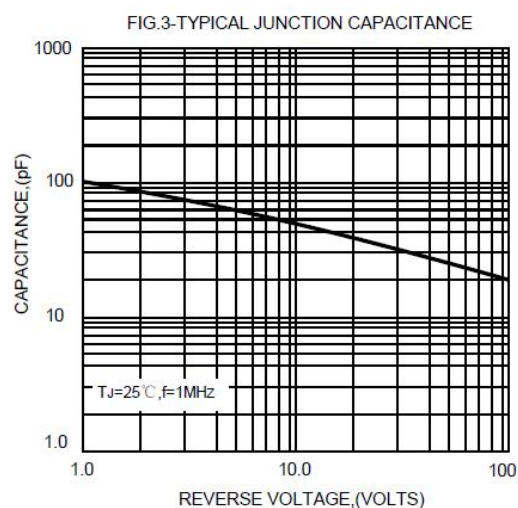
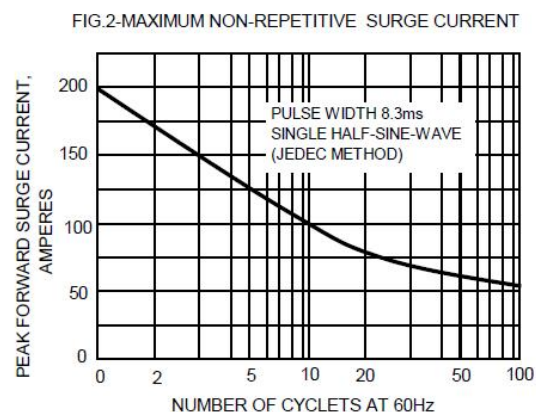
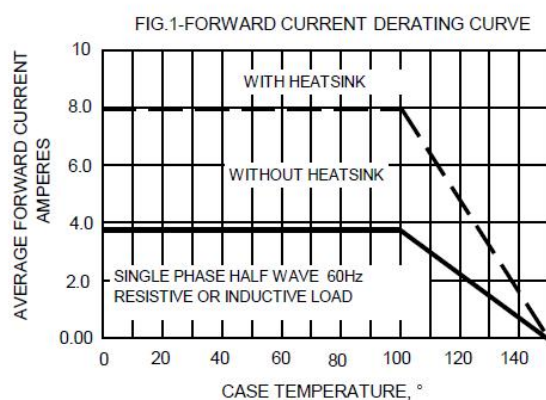
2. Device mounted on 100mm x 100mm x 1.6mm Cu Plate Heatsink.

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RATING AND CHARACTERISTIC CURVES GBU8005 THRU GBU810



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.