

## **GBU8005 THRU GBU810**

Reverse Voltage - 50 to 1000 Volts Forward Current - 8.0 Amperes

#### GLASS PASSIVATED BRIDGE RECTIFIERS

## **Features**

- Surge overload rating -200 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- ♦ Plastic material has U/L lammability classification 94V-0

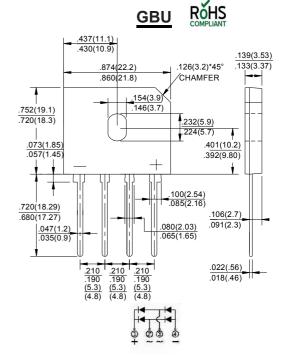
## **Mechanical Data**

Case: JEDEC GBU Molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbol marking on body

Mounting Position: Any



# **Maximum Ratings And Electrical Characteristics**

Dimensions in inches and (millimeters)

Ratings at 25°C ambient temperature unless otherwisespecified.

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

Parameter	SYMBOLS	MDD GBU8005	MDD GBU801	MDD GBU802	MDD GBU804	MDD GBU806	MDD GBU808	MDD GBU810	UNITS
Marking Code									
Maximum repetitive peak reverse voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward(with heatsink NOTE 2) Rectified current @Tc=100°C(without heatsink)	l(AV)	8.0							Α
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	Ігѕм	175							Α
Rating for Fusing(t<8.3ms)	l²t	127							A²s
Maximum forward voltage at 4.0A DC	VF	1.1							V
Maximum DC reverse current TA=25°C	l <sub>R</sub>	10							μ <b>А</b>
at rated DC blocking voltage Ta=125°C	O.5						mA		
Typical Junction Capacitance (Note 1)	Cı	60							pF
Typical Thermal Resistance (Note 2)	R $\theta$ Ja	2.2							°C/W
Operating junction temperature range	TJ	-55 to +150							° C
storage temperature range	Тѕтс	-55 to +150							° C

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

- 2.Device mounted on 75mm\*75mm\*1.6mm cu plate heatsink.
- 3. The typical data above is for reference only.

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## **Ratings And Characteristic Curves**

Fig. 1 Derating Curve for Output Rectified Current

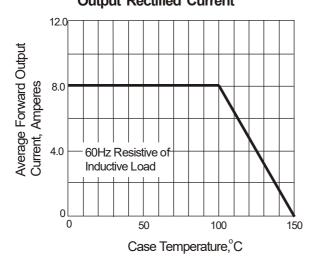


Fig. 3 Typical Instantaneous Forward Characteristics

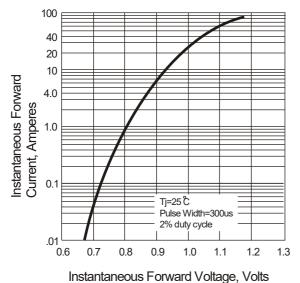


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

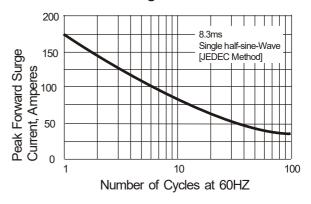


Fig. 4 Typical Reverse Characteristics

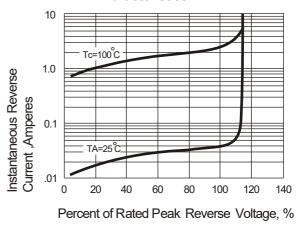
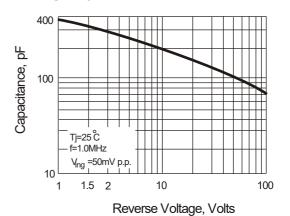


Fig. 5 Typical Junction Capacitance



The cruve graph is for reference only

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