

RGBU810

8 Amp Glass Passivated Bridge Rectifiers

Features

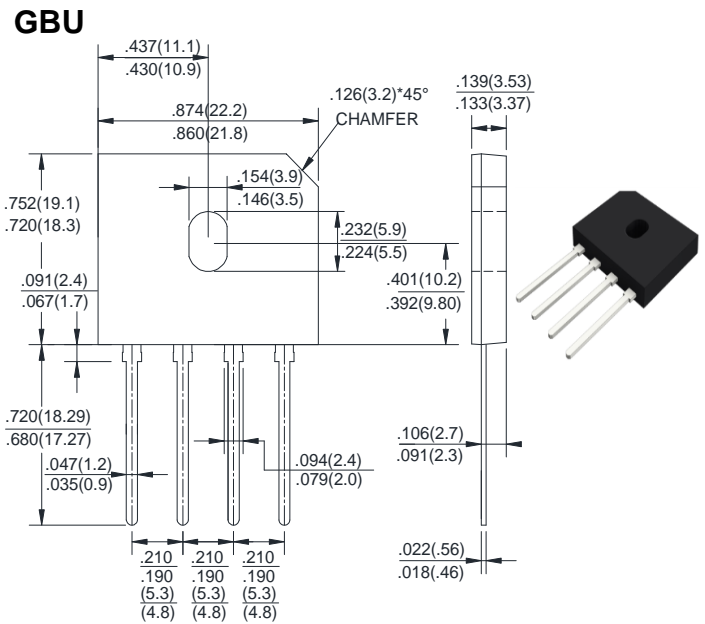
- Glass passivated chip
- Low forward voltage drop
- Ideal for printed circuit board
- High surge current capability
- Meet UL flammability classification 94V-0

Mechanical Data

- Polarity: Symbol marked on body
- Mounting position: Any

Applications

- General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballaster, adapter, etc.



Package Outline Dimensions in Inches (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%.

Characteristic	Symbol	RGBU810	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	1000	V
Maximum RMS Voltage	VRMS	700	V
Maximum DC Blocking Voltage	VDC	1000	V
Maximum Average Forward (with heatsink Note 2)	I(AV)	8.0	A
Rectified Current @ Tc=100℃ (without heatsink)		2.8	
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	IFSM	175	A
I ² t Rating for Fusing (t<8.3mS)	I ² t	127.1	A ² s
Peak Forward Voltage per Diode at 4A DC	VF	1.3	V
Maximum DC Reverse Current at Rated @TJ=25℃	IR	5.0	μA
DC Blocking Voltage per Diode @TJ=125℃		500	
Maximum Reverse Recovery Time(Note1)	TRR	500	ns
Typical Junction Capacitance per Diode (Note2)	CJ	50	pF
Typical Thermal Resistance to case (with heatsink (Note3))	RθJC	2	℃/W
Operating Junction Temperature Range	TJ	-55 to +150	℃
Storage Temperature Range	TSTG	-55 to +150	℃

Notes: 1. Measured with IF=0.5A,IR=1A,IRR=0.25A

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

3. Device mounted on 75mm*75mm*1.6mm Cu plate heatsink.

Rating and Characteristic Curves

Fig. 1 - Forward Current Derating Curve

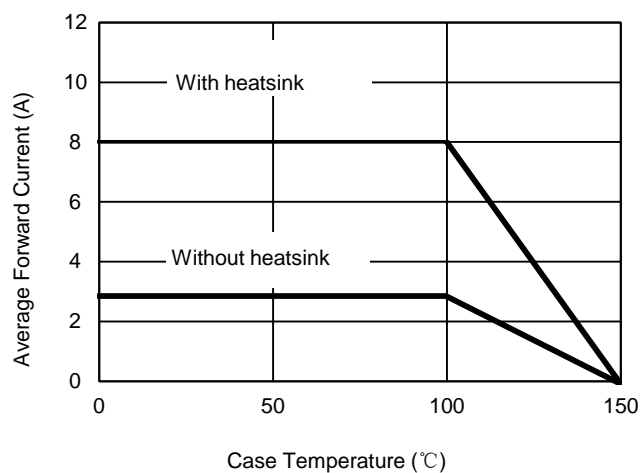


Fig. 2 - Maximum Non-Repetitive Surge Current

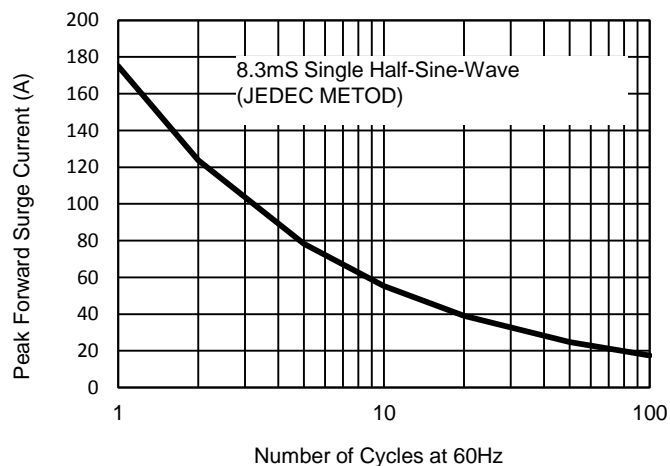


Fig. 3 - Typical Reverse Characteristics

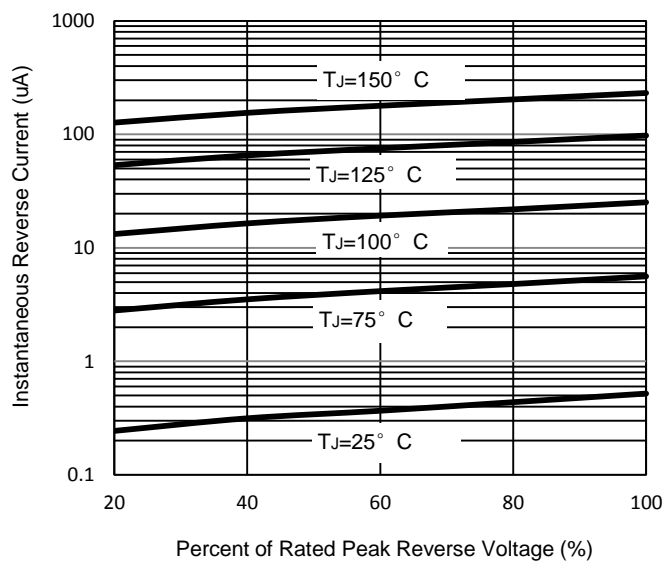


Fig. 4 - Typical Forward Characteristics

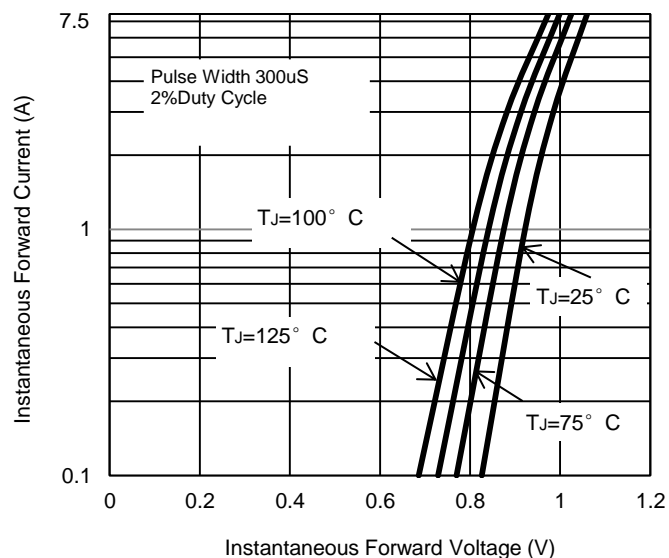


Fig. 5 - Typical Junction Capacitance

