

## **Glass Passivated Bridge Rectifiers**

# Reverse Voltage - 800 Volts Forward Current - 15 Amperes

#### **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**

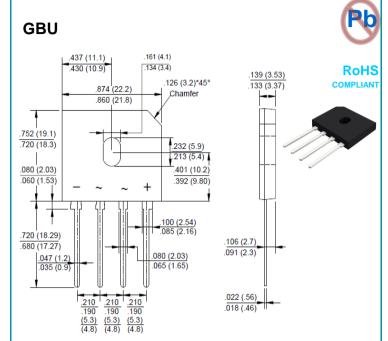
• Polarity: Symbol marked on body

Mounting position: Any

Note: Products with logo and are made by HY Electronic (Cayman) Limited.

### **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%.

Characteristics	Symbol	GBU1508L	Unit
Maximum Repetitive Peak Reverse Voltage	Vrrm	800	V
Maximum RMS Voltage	VRMS	560	V
Maximum DC Blocking Voltage	VDC	800	V
Maximum Average Forward Rectified Current (with heatsink Note 2)	I(AV)	15.0	А
'@ TC=100 $^{\circ}$ C (without heatsink)		3.2	
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave,	IFSM	240	А
Superimposed on Rated Load (JEDEC Method)			
I <sup>2</sup> t Rating for Fusing (t<8.3mS)	l <sup>2</sup> t	239	A <sup>2</sup> s
Peak Forward Voltage per Diode at 7.5A DC	VF	0.95	V
Maximum DC Reverse Current at Rated @TJ=25℃	lr	5.0	μΑ
DC Blocking Voltage per Diode @TJ=125°C		500	
Typical Junction Capacitance per Diode (Note1)	Сл	70	pF
Typical Thermal Resistance to Ambient (Note2)	Reja	8	°C/W
Typical Thermal Resistance to case (Note2)	Rөjc	2	
Typical Thermal Resistance to lead (Note2)	Røjl	1.5	
Operating Junction Temperature Range	TJ	-55 to +150	$^{\circ}\mathbb{C}$
Storage Temperature Range	Тѕтс	-55 to +150	$^{\circ}$

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

- 2.Device mounted on 100mm\*100mm\*1.6mm Cu plate heatsink.
- 3. The typical data above is for reference only

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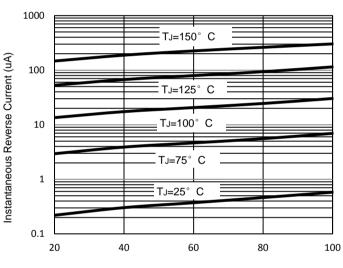
Fig. 1 - Forward Current Derating Curve With heatsink Without heatsink

300 8.3mS Single Half-Sine-Wave (JEDEC METOD) 250 Peak Forward Surge Current (A) 200 150 100 50 0 10 100 Number of Cycles at 60Hz

Fig. 2 - Maximum Non-Repetitive Surge Current

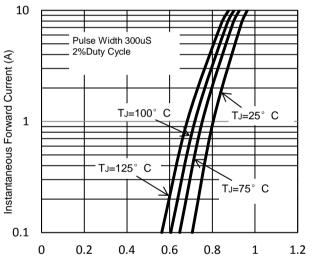
12 Average Forward Current (A) 9 6 3 0 100 150 0 50 Case Temperature (°C)

Fig. 3 - Typical Reverse Characteristics



Percent of Rated Peak Reverse Voltage (%)

Fig. 4 - Typical Forward Characteristics





#### Disclaimer

ALL specifications and data are subject to be changed without notice to improve reliability function or design or other reasons.

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