

Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts

Forward Current - 8.0 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

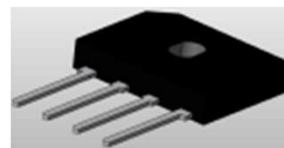
- Polarity: Symbol marked on body
- Mounting position: Any

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

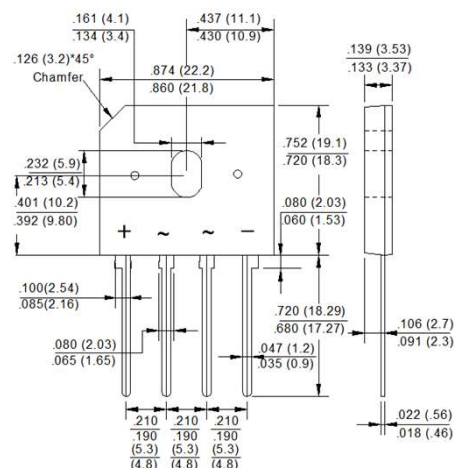
Applications

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

GBU



RoHS
COMPLIANT



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	GBU	GBU	GBU	GBU	GBU	GBU	GBU	Unit
		8005	801	802	804	806	808	810	
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)	I(AV)	8.0							A
Rectified Current @ Tc=100℃ (without heatsink)		2.9							
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	IFSM	220							A
I²t Rating for Fusing (t<8.3mS)	I²t	200							A²s
Peak Forward Voltage per Diode at 4A DC	VF	1.0							V
Maximum DC Reverse Current at Rated @TJ=25℃	IR	5.0							µA
DC Blocking Voltage per Diode @TJ=125℃		500							
Typical Junction Capacitance per Diode (Note1)	CJ	60							pF
Typical Thermal Resistance to Ambient (Note2)	RθJA	10							℃/W
Typical Thermal Resistance to case (Note2)	RθJC	2.2							
Typical Thermal Resistance to lead (Note2)	RθJL	3							
Operating Junction Temperature Range	TJ	-55 to +150							℃
Storage Temperature Range	TSTG	-55 to +150							℃

Notes: 1. Measured at 1.0 MHz 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



Fig. 1 - Forward Current Derating Curve

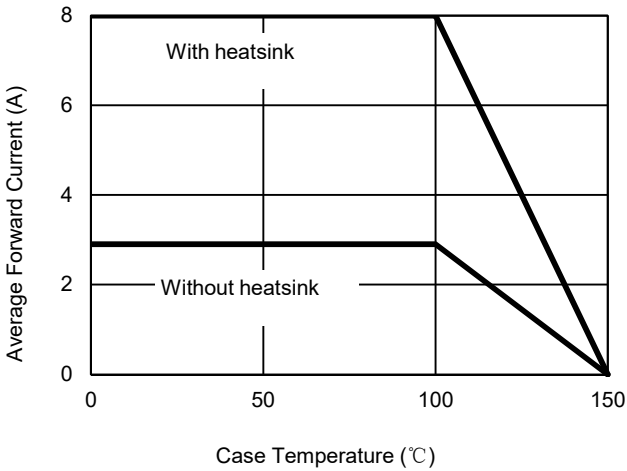


Fig. 2 - Maximum Non-Repetitive Surge Current

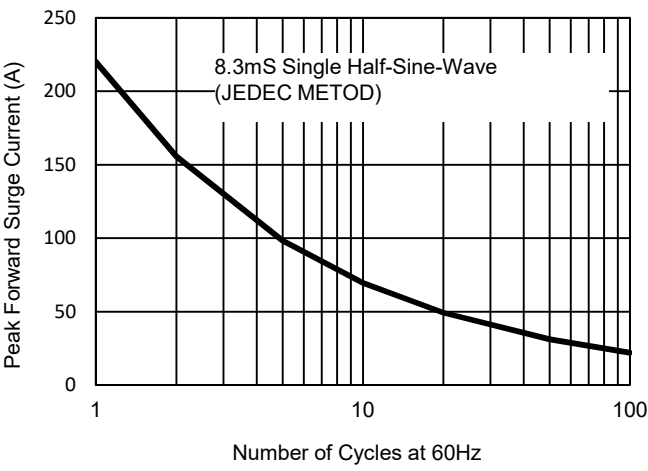


Fig. 3 - Typical Reverse Characteristics

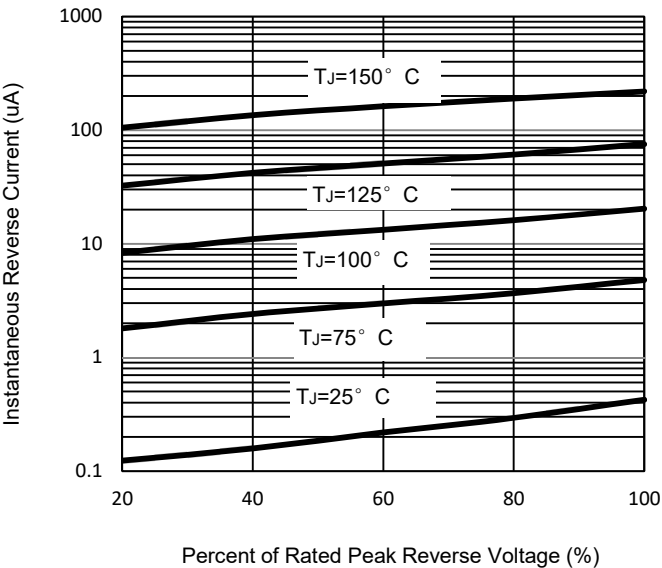


Fig. 4 - Typical Forward Characteristics

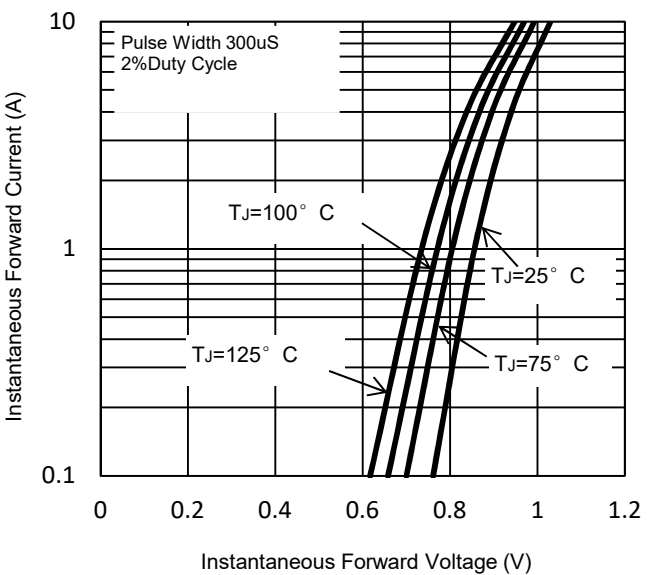
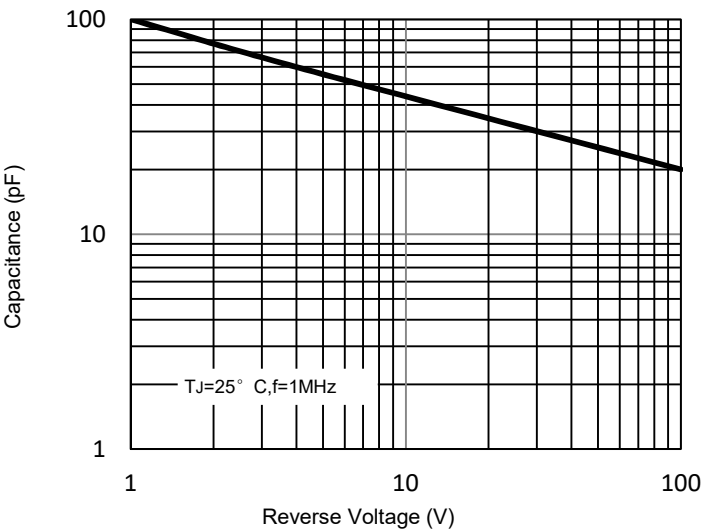


Fig. 5 - Typical Junction Capacitance



The curve above is for reference only.



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