

**Glass Passivated Bridge Rectifiers****Reverse Voltage - 50 to 1000 Volts****Forward Current - 6.0 Amperes****Features**

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

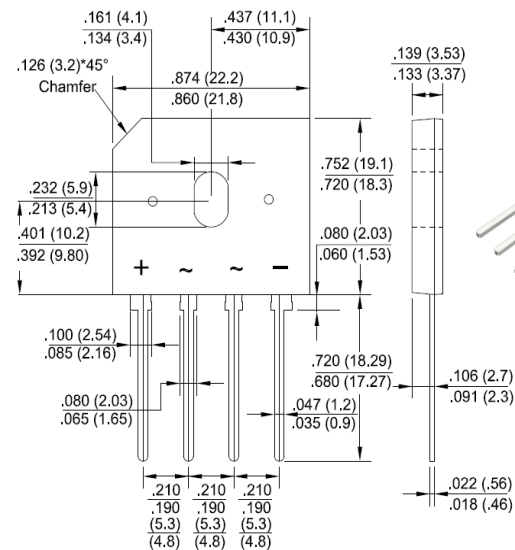
Mechanical Data

- 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****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	GBU6005	GBU601	GBU602	GBU604	GBU606	GBU608	GBU610	Unit
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)	6.0							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
I²t Rating for Fusing (t<8.3mS)	I²t	127.1							A²s
Peak Forward Voltage per Diode at 3A 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	50							pF
Typical Thermal Resistance to case (with heatsink (Note2))	RθJC	2							℃/W
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

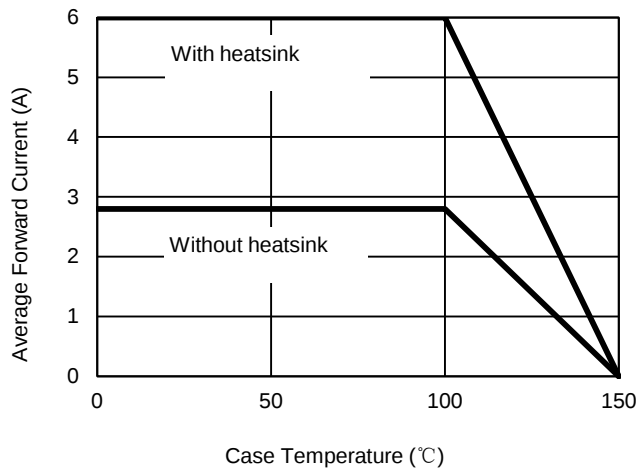


Fig. 2 - Maximum Non-Repetitive Surge Current

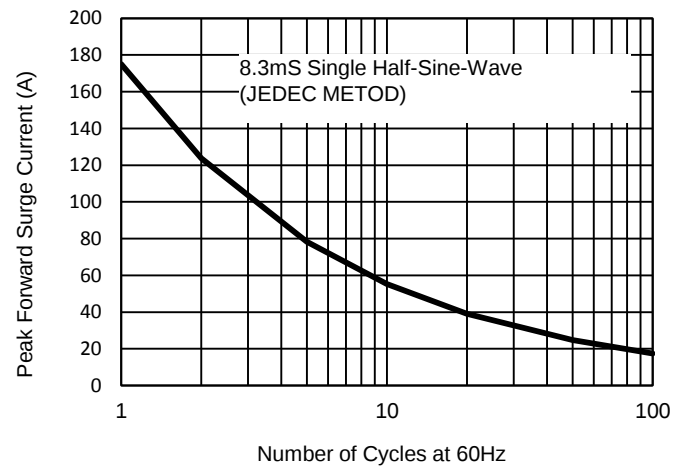


Fig. 3 - Typical Reverse Characteristics

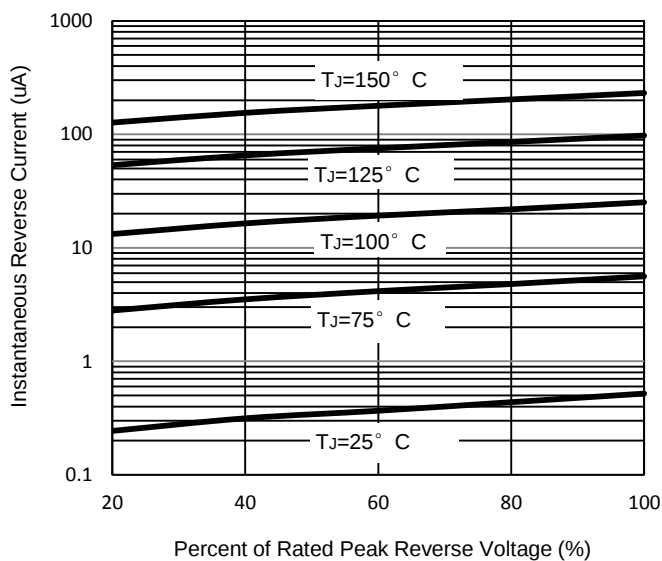


Fig. 4 - Typical Forward Characteristics

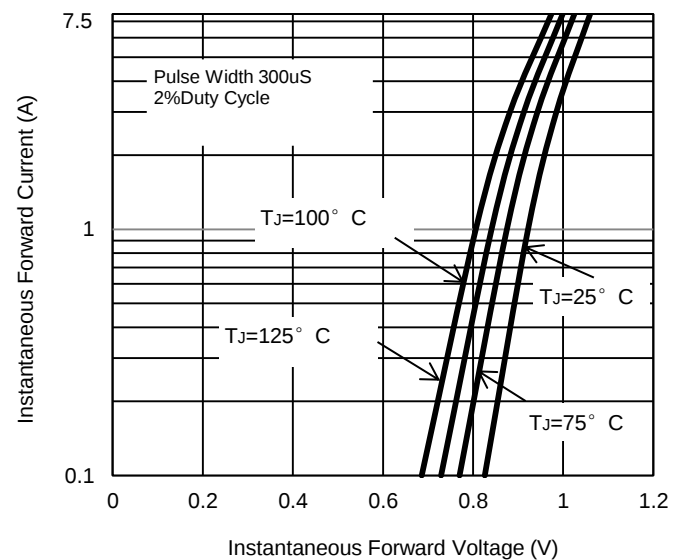
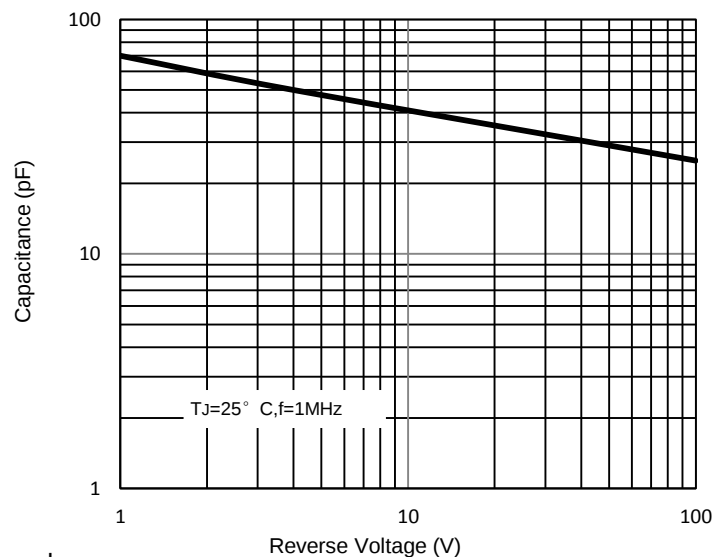


Fig. 5 - Typical Junction Capacitance



The curve above is for reference only.



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