



**Low VF 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

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

**Applications**

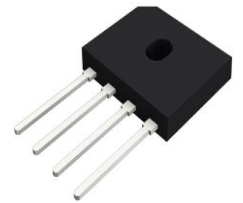
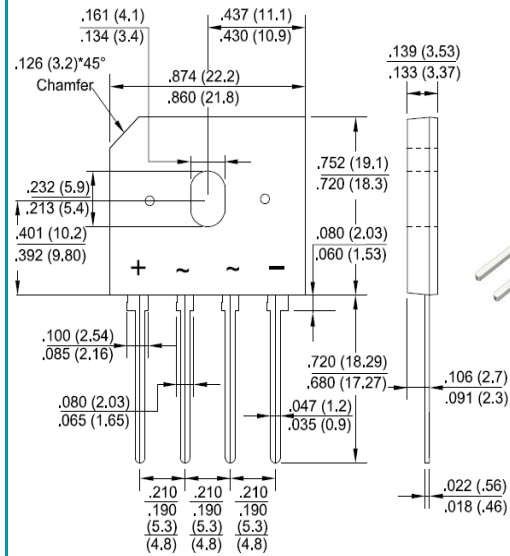
- General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballaster, adapter, etc.

**Reverse Voltage - 600 Volts**  
**Forward Current - 25 Amperes**



**RoHS COMPLIANT**

**GBU**



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	GBU2506F	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	600	V
Maximum RMS Voltage	VRMS	420	V
Maximum DC Blocking Voltage	VDC	600	V
Maximum Average Forward (with heatsink Note 2)	I(AV)	25.0	A
Rectified Current @ Tc=100°C (without heatsink)		4.2	
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	IFSM	350	A
I <sup>2</sup> t Rating for Fusing (t<8.3mS)	I <sup>2</sup> t	508	A <sup>2</sup> s
Peak Forward Voltage per Diode at 12.5A DC	VF	0.92	V
Maximum DC Reverse Current at Rated @Tj=25°C	IR	5.0	µA
DC Bolcking Voltage per Diode @Tj=125°C		500	
Typical Junction Capacitance per Diode (Note1)	CJ	70	pF
Typical Thermal Resistance to Ambient (Note2)	RθJA	10	°C/W
Typical Thermal Resistance to case (Note2)	RθJC	2	
Typical Thermal Resistance to lead (Note2)	RθJL	2.2	
Operating Junction Temperature Range	TJ	-55 to +150	°C
Storage Temperature Range	TSTG	-55 to +150	°C

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 .



Fig. 1 - Forward Current Derating Curve

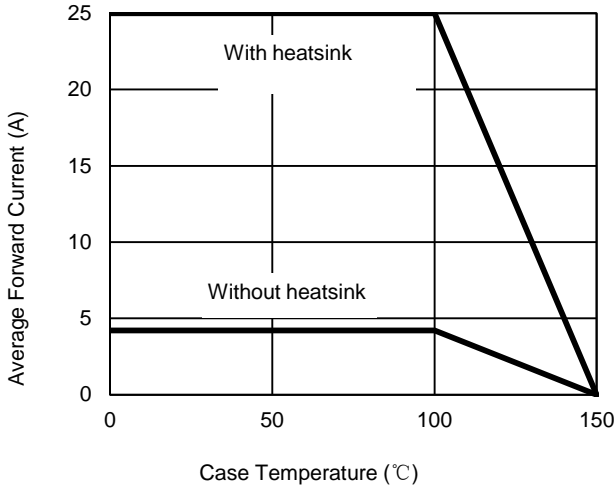


Fig. 2 - Maximum Non-Repetitive Surge Current

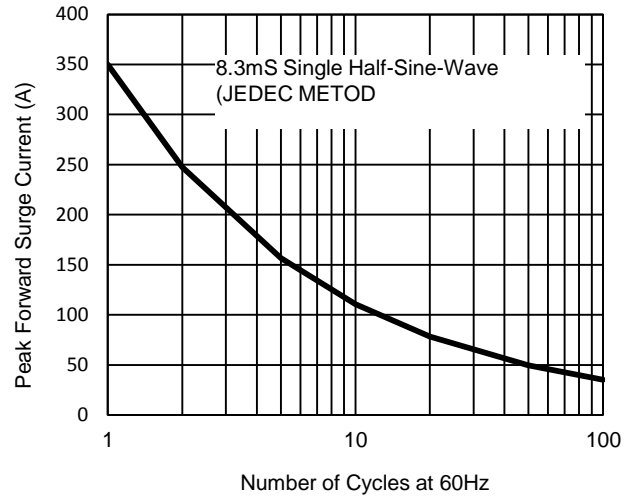


Fig. 3 - Typical Reverse Characteristics

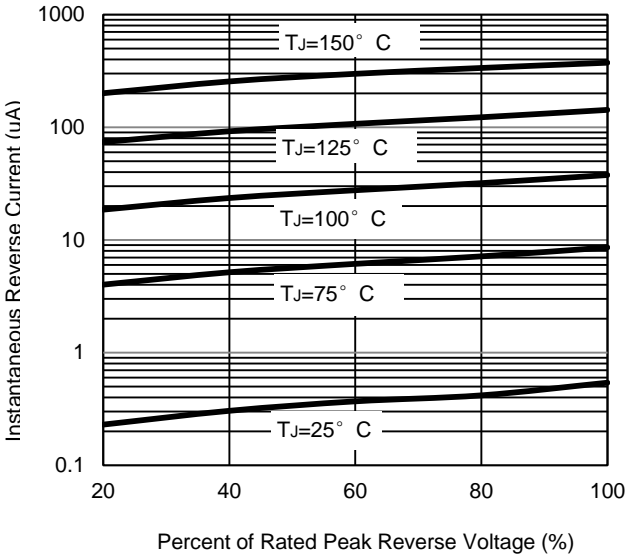
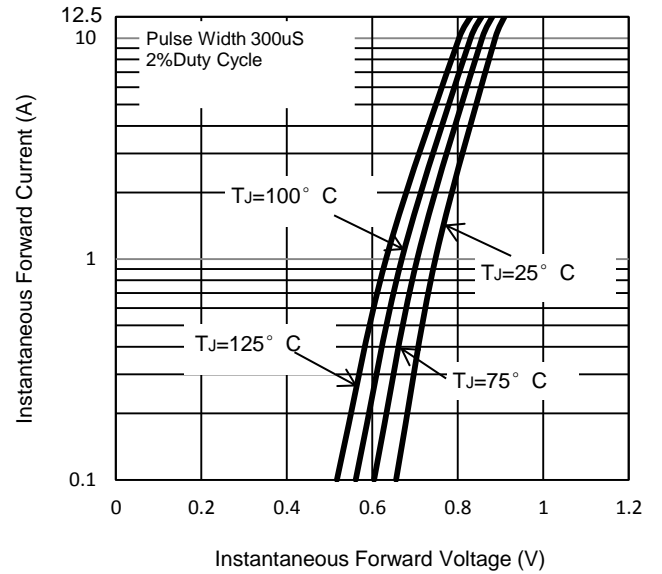


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.



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