



## Low VF Glass Passivated Bridge Rectifiers

Reverse Voltage - 600 Volts

Forward Current - 10 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

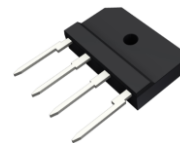
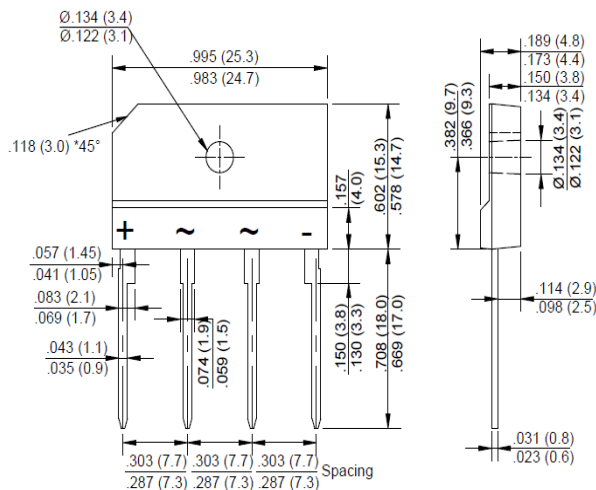
- Polarity: Symbol marked on body
- Mounting position: Any

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.

4GBJ

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%.

Characteristics	Symbol	4GBJ1006F	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)	10.0	A
Rectified Current @ Tc=100°C (without heatsink)		3.0	
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	IFSM	210	A
I <sup>2</sup> t Rating for Fusing (t<8.3mS)	I <sup>2</sup> t	183	A <sup>2</sup> s
Peak Forward Voltage per Diode at 5A DC	VF	0.95	V
Maximum DC Reverse Current at Rated @T <sub>J</sub> =25°C	IR	5.0	μA
DC Blocking Voltage per Diode @T <sub>J</sub> =125°C		500	
Typical Junction Capacitance per Diode (Note1)	C <sub>J</sub>	55	pF
Typical Thermal Resistance to Ambient (without heatsink)	R <sub>θJA</sub>	24	°C/W
Typical Thermal Resistance to case (with heatsink (Note2) )	R <sub>θJC</sub>	1.4	°C/W
Typical Thermal Resistance to lead (without heatsink)	R <sub>θJL</sub>	3	°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

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

2. Device mounted on 150mm\*150mm\*1.6mm Cu plate heatsink.

3. The typical data above is for reference only



Fig. 1 - Forward Current Derating Curve

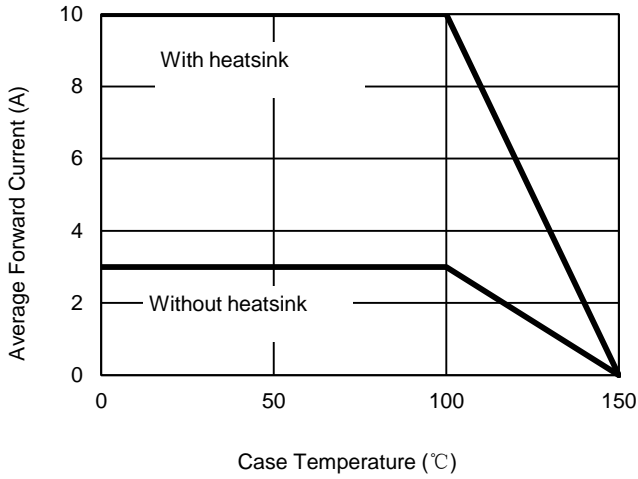


Fig. 2 - Maximum Non-Repetitive Surge Current

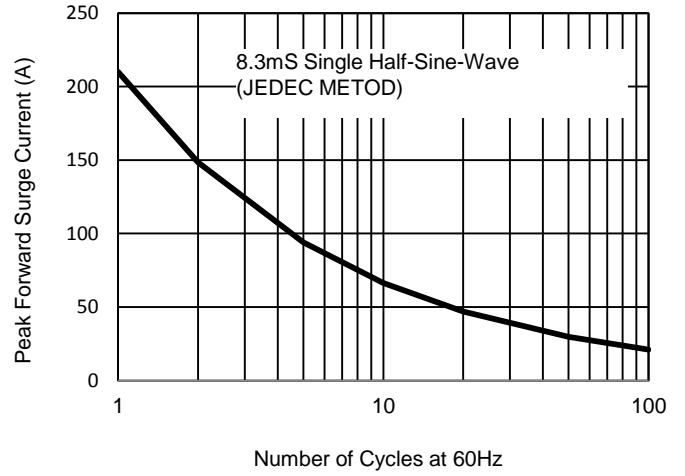


Fig. 3 - Typical Reverse Characteristics

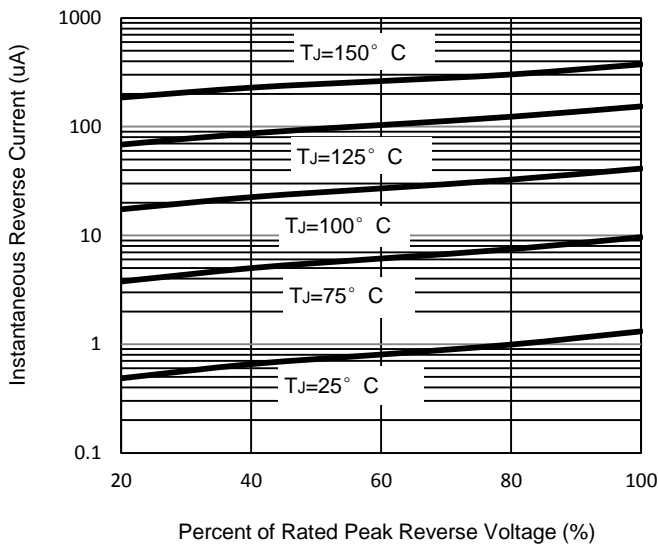


Fig. 4 - Typical Forward Characteristics

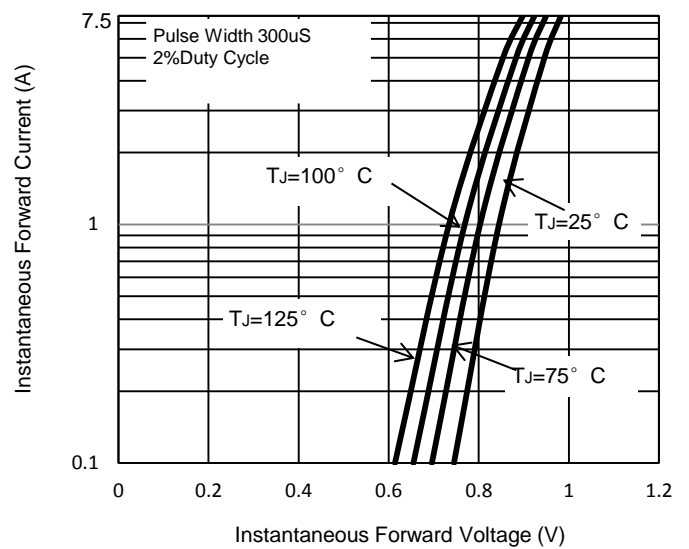
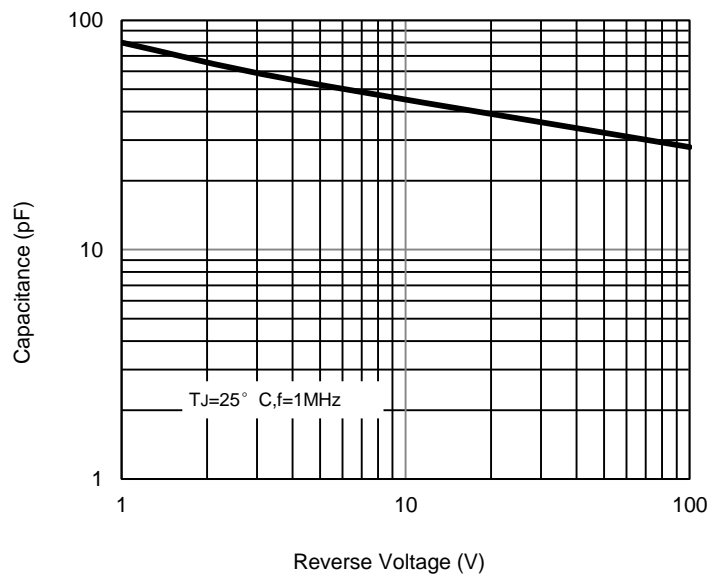


Fig. 5 - Typical Junction Capacitance



The curve above is for reference only.



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