

Features

- Glass passivated chip
- Low forward voltage drop
- Ideal for printed circuit board
- High surge current capability

Mechanical Data

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

Applications

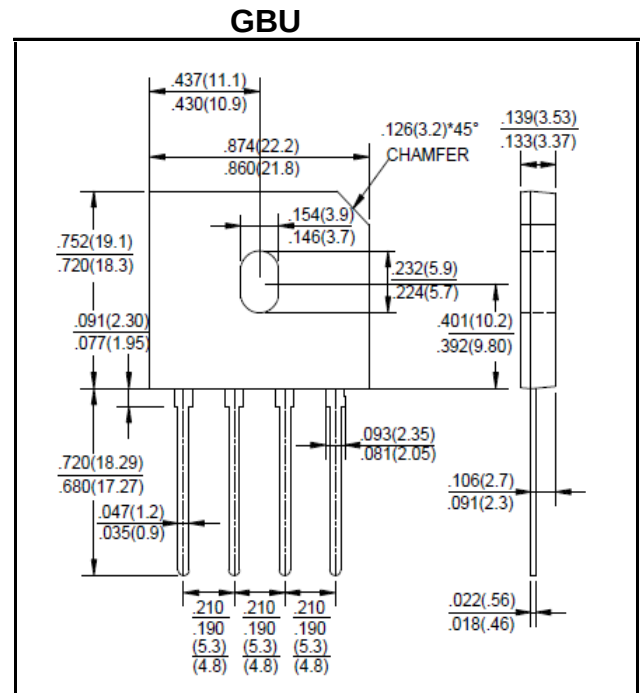
- General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballaster, adapter, etc.

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%.



Package Outline Dimensions in Inches (Millimeters)

Characteristics	Symbol	GBU1006L	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 Rectified Current (with heatsink Note 2)	I(AV)	10.0	A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	IFSM	220	A
I ² t Rating for Fusing (t<8.3mS)	I ² t	239	A ² s
Peak Forward Voltage per Diode at 5A DC	VF	0.92	V
Maximum DC Reverse Current at Rated @T _J =25°C	IR	5.0	μA
DC Blocking Voltage per Diode @T _J =125°C		127	
Typical Junction Capacitance per Diode (Note1)	CJ	70	pF
Typical Thermal Resistance to Ambient (Note2)	RθJA	9	°C/W
Typical Thermal Resistance to case (Note2)	RθJC	2	
Typical Thermal Resistance to lead (Note2)	RθJL	1.5	
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

Rating and Characteristic Curves

Fig. 1 - Forward Current Derating Curve

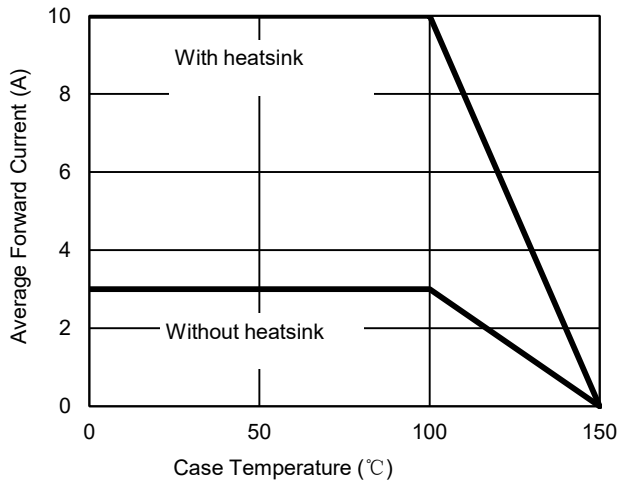


Fig. 2 - Maximum Non-Repetitive Surge Current

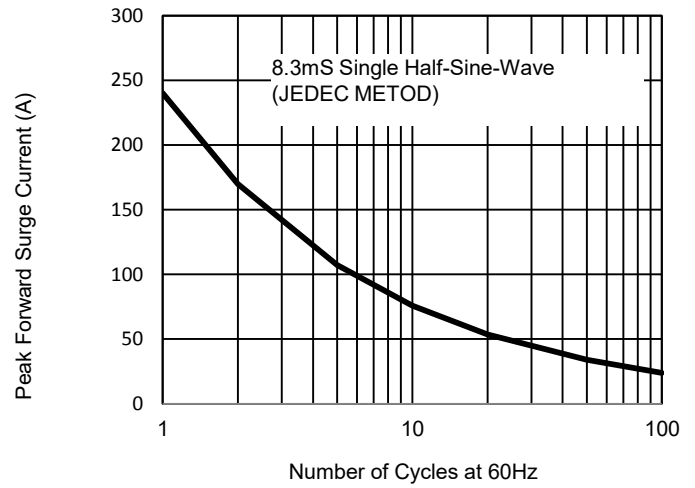


Fig. 3 - Typical Reverse Characteristics

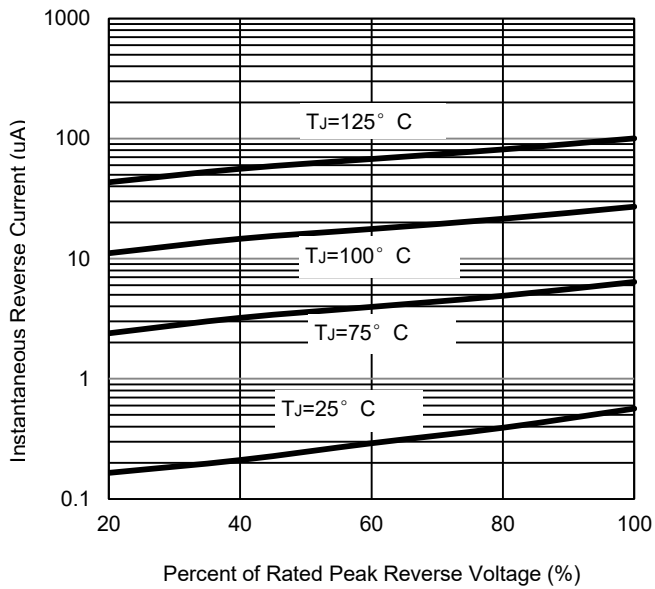


Fig. 4 - Typical Forward Characteristics

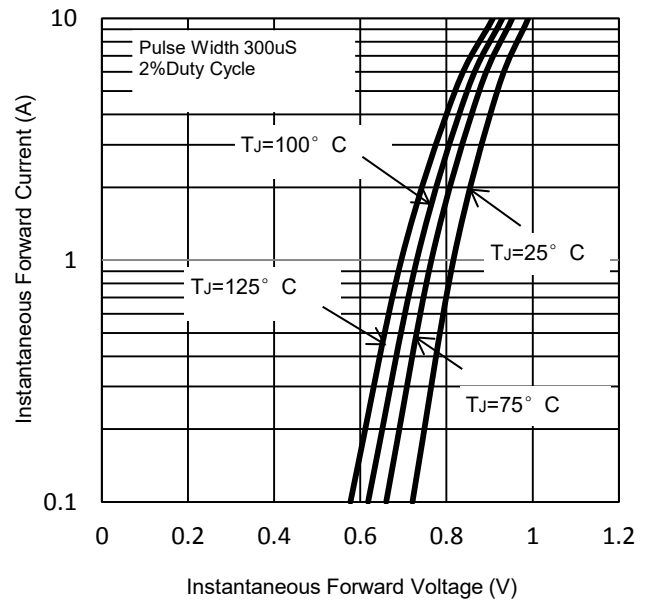


Fig. 5 - Typical Junction Capacitance

