

### Single Phase Glass Passivated Bridge Rectifiers

#### FEATURES

- Glass passivated chip junction
- High surge current capability
- Low reverse leakage current
- High temperature soldering guaranteed: 270°C±5°C/10 seconds
- RoHS compliant

#### MECHANICAL DATA

- Case: GBUHS
- Case material: molding compound meets UL 94V-0 flammability rating
- Polarity: as marked on case

#### TYPICAL APPLICATION

General purpose use in Household electric appliances, industrial power supply, industrial automation equipment, Electric welding machine, etc.

#### MAXIMUM RATINGS

T<sub>A</sub>=25°C unless otherwise noted

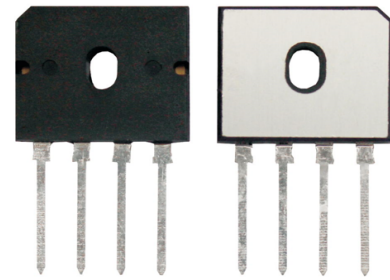
Parameter	Symbol	GBU 806HS	GBU 808HS	GBU 810HS	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	600	800	1000	V
Average Forward Rectified Current (With heatsink, T <sub>C</sub> =100°C)	I <sub>F(AV)</sub>	8			A
Peak Forward Surge Current (10ms single half sine-wave superimposed on rated load)	I <sub>FSM</sub>	165			A
Rating for Fusing (1ms<t<8.3ms, T <sub>J</sub> =25°C, Rating of per diode)	I <sup>2</sup> t	112			A <sup>2</sup> s
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150			°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150			°C

#### ELECTRICAL CHARACTERISTICS

T<sub>A</sub>=25°C unless otherwise noted

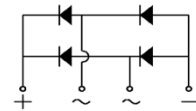
Parameter	Test Conditions	Symbol	Value	Unit
Peak Forward Voltage@I <sub>F</sub> =4A (Pulse measurement, Rate of per diode)		V <sub>F</sub>	1.1	V
Reverse Current@V <sub>R</sub> =V <sub>RRM</sub> (Pulse measurement, Rate of per diode)	T <sub>J</sub> =25°C	I <sub>R</sub>	5	µA
	T <sub>J</sub> =125°C		350	
Typical Thermal Resistance	without heatsink	R <sub>θJA</sub>	20	°C/W
	with heatsink	R <sub>θJC</sub>	0.85	

#### GBUHS



RoHS  
COMPLIANT

HALOGEN  
FREE  
AVAILABLE



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#### RATINGS AND CHARACTERISTICS CURVES

FIG.1 Derating Curve For Output Rectified Current

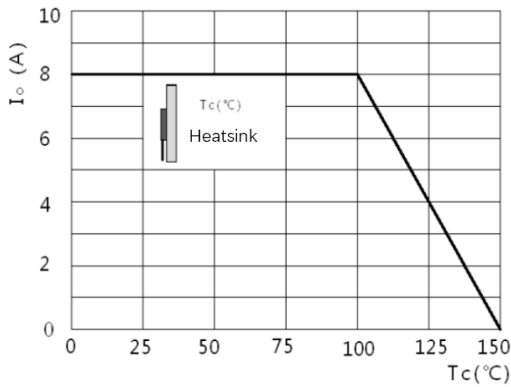


FIG.2 Maximum Non-Repetitive Peak Forward Surge Current

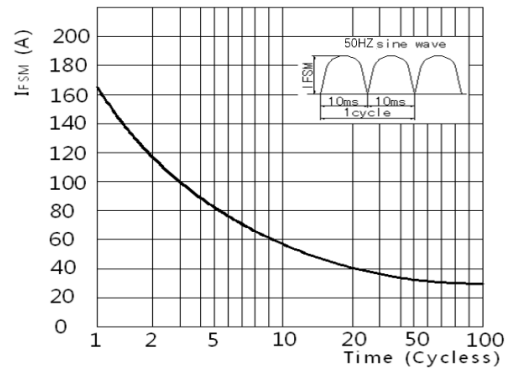


FIG.3 Typical Reverse Characteristics

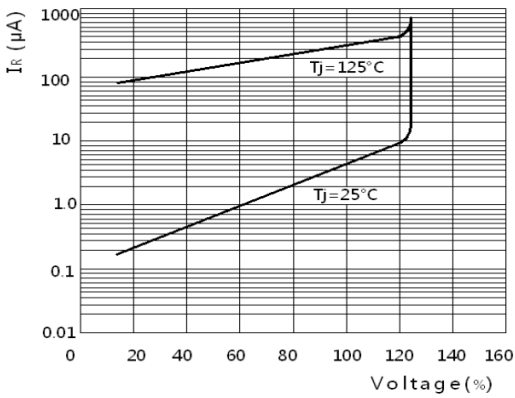
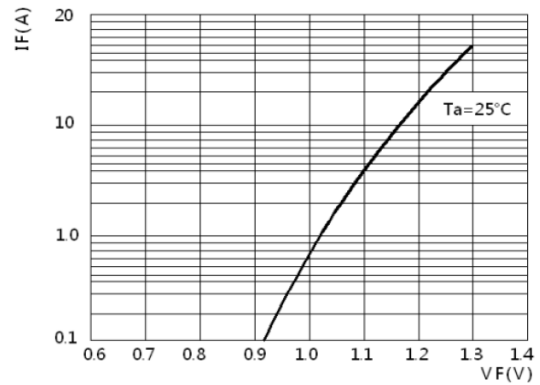
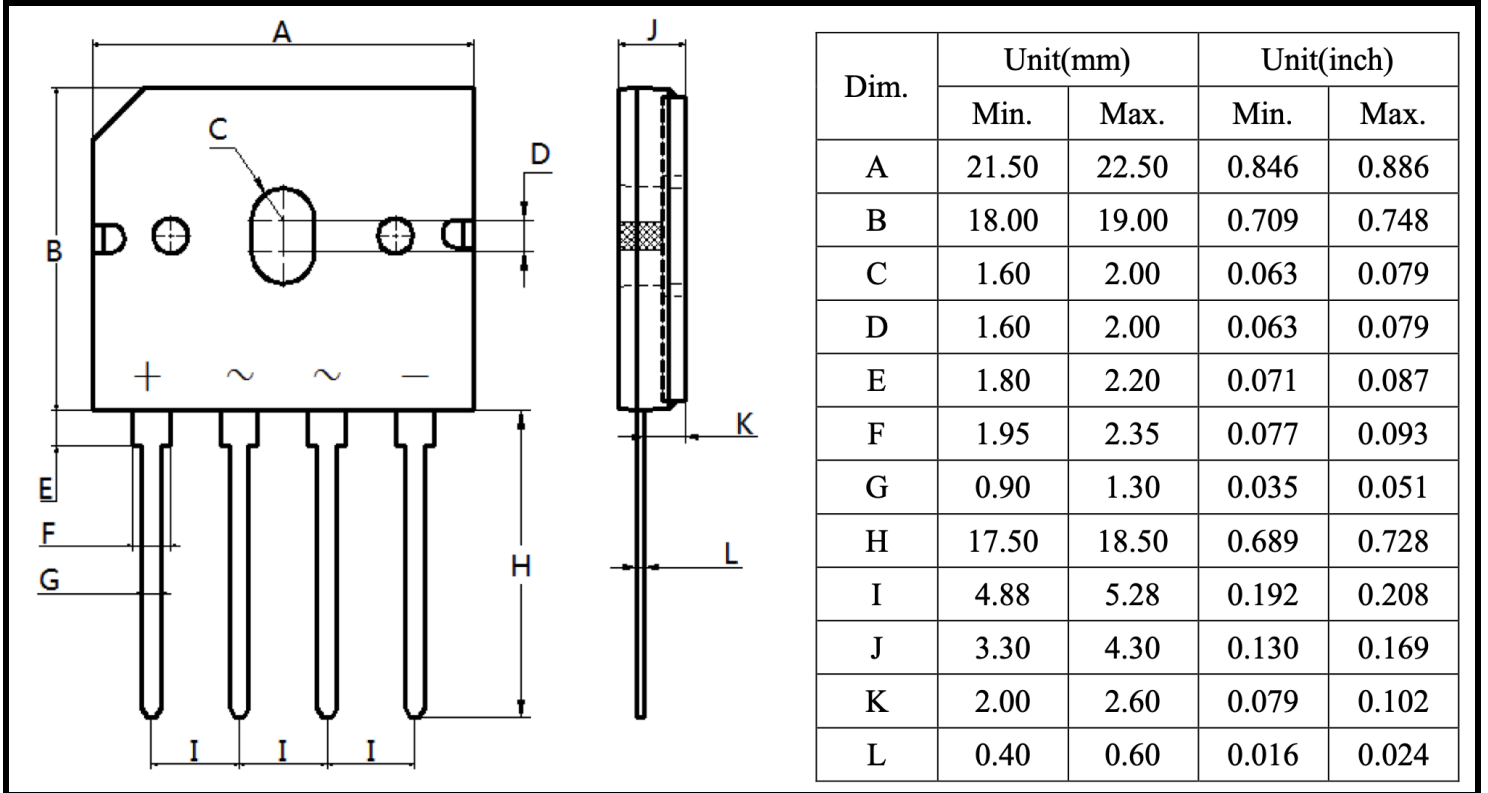


FIG.4 Typical Forward Characteristics



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#### PACKAGE OUTLINE DIMENSIONS



#### PACKING INFORMATION

Package	Inner Box (PCS)	Carton (PCS)
GBUHS	250	3,000