

GBU1006HS THRU GBU1010HS

GBUHS

10A, 600V to 1000V Single Phase Glass Passivated Bridge Rectifiers

FEATURES

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

MECHANICAL DATA

- Case: GBUHS

- Case material: molding compound meets UL 94V-0 flammability rating

- Plolarity: as marked on case

ROHS COMPLIANT HALOGEN FREE AVAILABLE

TYPICAL APPLICATION

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

MAXIMUM RATINGS

 T_A =25°C unless otherwise noted

Parameter	Symbol	GBU 1006HS	GBU 1008HS	GBU 1010HS	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	600	800	1000	V
Average Forward Rectified Current (With heatsink, T _C =85 °C)	I _{F(AV)}	10		А	
Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load)	I _{FSM}	210		Α	
Rating for Fusing (1ms <t<8.3ms,tj=25°c,rating diode)<="" of="" per="" td=""><td>l²t</td><td colspan="2">183</td><td>A²s</td></t<8.3ms,tj=25°c,rating>	l ² t	183		A ² s	
Operating Junction Temperature Range	T_J	-55 to +150		$^{\circ}\!\mathbb{C}$	
Storage Temperature Range	T _{STG}	-55 to +150		$^{\circ}\!\mathbb{C}$	

ELECTRICAL CHARACTERISTICS

T_A=25℃ unless otherwise noted

Parameter	Test Conditions	Symbol	Value	Unit
Peak Forward Voltage@I _F =5A (Pulse measurement,Rate of per diode)		V _F	1.05	V
Reverse Current@V _R =V _{RRM}	T _J =25℃	1_	5	
(Pulse measurement,Rate of per diode)	T _J =125℃	I _R	500	μA
Typical Thermal Resistance	without heatsink	$R_{\theta JA}$	22	°C/W
	with heatsink	$R_{\theta JC}$	0.85	



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RATINGS AND CHARACTERISTICS CURVES

FIG.1 Derating Curve For Output Rectified Current

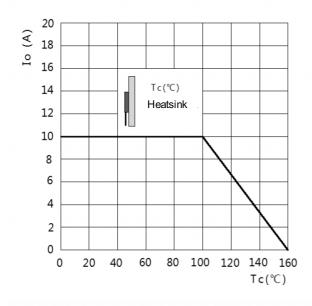


FIG.2 Maximum Non-Repetitive Peak Forward Surge Current

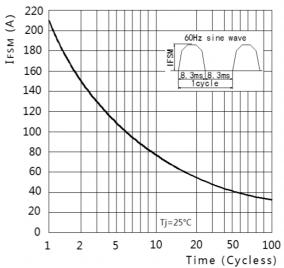


FIG.3 Typical Reverse Characteristics

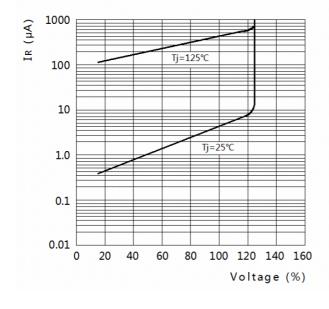
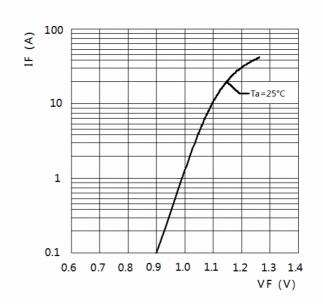


FIG.4 Typical Forward Characteristics

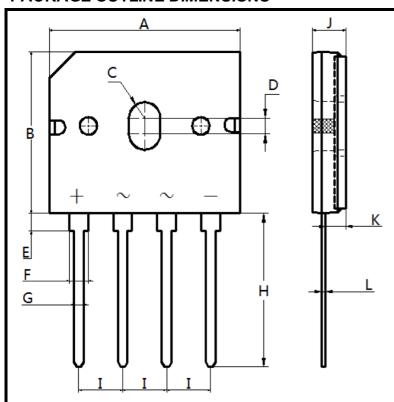




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PACKAGE OUTLINE DIMENSIONS



Dim.	Unit(mm)		Unit(inch)	
Dim.	Min.	Max.	Min.	Max.
A	21.50	22.50	0.846	0.886
В	18.00	19.00	0.709	0.748
С	1.60	2.00	0.063	0.079
D	1.60	2.00	0.063	0.079
Е	1.80	2.20	0.071	0.087
F	1.95	2.35	0.077	0.093
G	0.90	1.30	0.035	0.051
Н	17.50	18.50	0.689	0.728
I	4.88	5.28	0.192	0.208
J	3.30	4.30	0.130	0.169
K	2.00	2.60	0.079	0.102
L	0.40	0.60	0.016	0.024

PACKING INFORMATION

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

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