

FEATURES

- Plastic package has UL Flammability Classification 94V-0
- Glass passivated chip junction
- High current capability
- Low forward voltage drop
- Dielectric tested to maximum case, storage and junction temperature to 150 °C to withstand 1500 V
- High temperature soldering guaranteed: 275°C/10S
- Component in accordance to RoHS 2015/863/EU

MECHANICAL DATA

- Case: GBJ-HB molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Polarity: As marked
- Mounting Position: Any
- Mounting Torque: MAX 10cm-Kg (8.8 inches-lbs)
- Recommended Torque: 5.7 cm-Kg (5 inches-lbs)
- Weight: 7.40grams (approx.)

TYPICAL APPLICATIONS

Used in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, charger, home appliances, office equipment, and telecommunication applications.

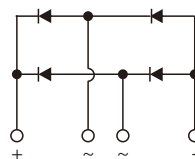
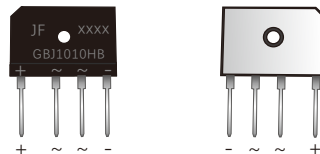
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(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%.)

Parameters	Symbols	GBJ1001HB	GBJ1002HB	GBJ1004HB	GBJ1006HB	GBJ1008HB	GBJ1010HB	Units	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	Volts	
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	Volts	
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	Volts	
Maximum Average Forward Rectified Current	I_{FAV}	10						Amps	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	180						Amps	
Rating for fusing (t=8.3ms)	I^2t	134						A ² s	
Maximum Instantaneous Forward Voltage at 5.0 A DC	V_F	1.1						Volts	
Maximum DC Reverse Current at rated DC blocking voltage	$T_J=25^{\circ}C$	5						I_R	μA
	$T_J=125^{\circ}C$							100	μA
Typical thermal resistance (Note 1)	$R_{\theta JA}$	18						$^{\circ}C/W$	
	$R_{\theta JC}$	2.0							
Operating temperature range	T_J	-55 to +150						$^{\circ}C$	
Storage temperature range	T_{STG}	-55 to +150						$^{\circ}C$	

Note: 1. Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

GBJ-HB



Marking
JF: Logo
XXXX: Data code
GBJ1010: Type

FIG.1-MAXIMUM FORWARD SURNGE CURRENT

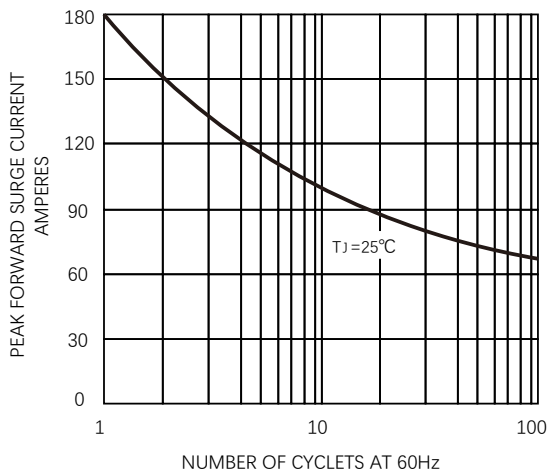


FIG.2-FORWARD CURRENT DERATING CURVE

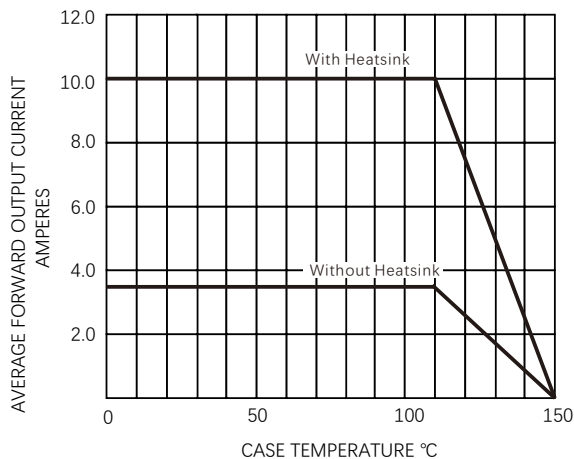


FIG. 3-TYPICAL FORWARD CHARACTERISTICS

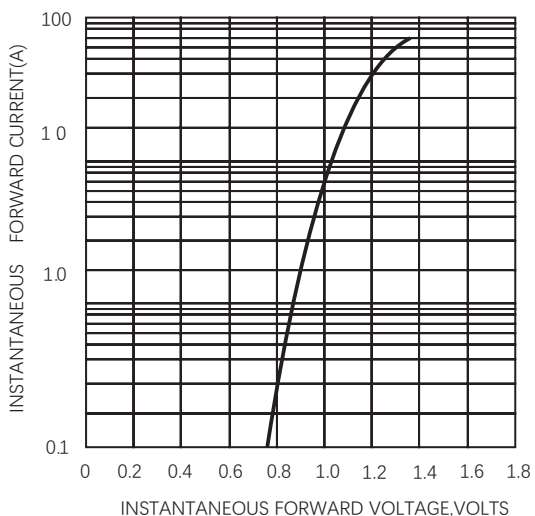
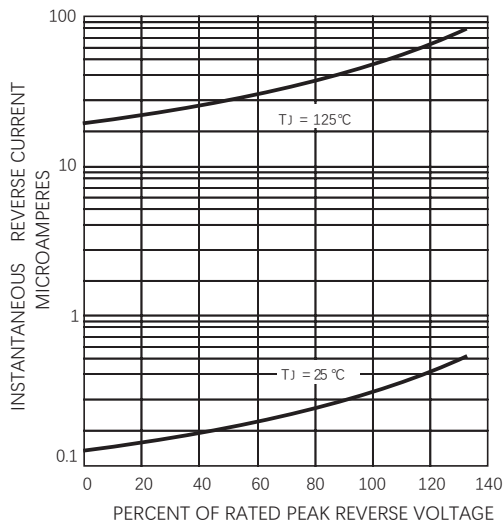
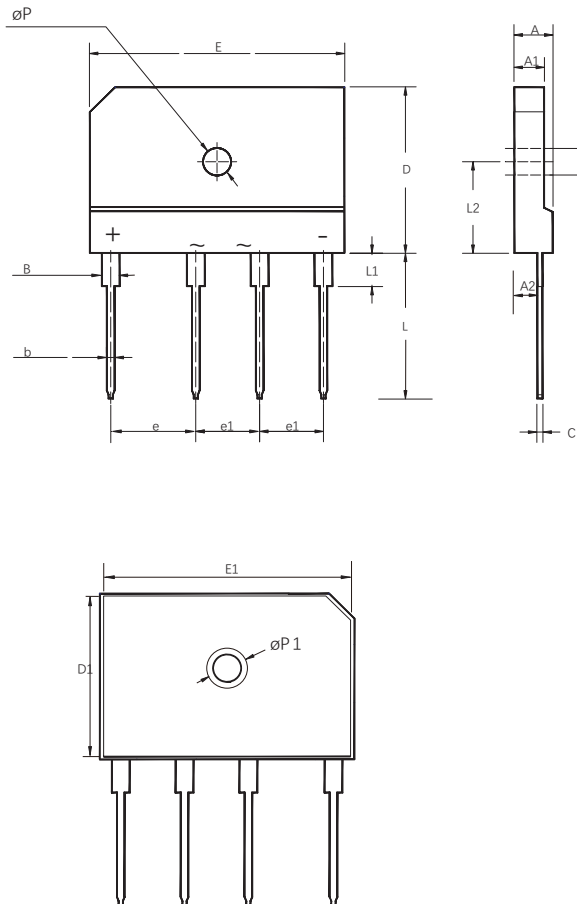


FIG.4 -TYPICAL REVERSE CHARACTERISTICS



GBJ-HB



GBJ		
Dim	Min	Max
A	4.40	5.00
A1	3.30	3.80
A2	2.60	3.00
B	1.90	2.40
b	0.90	1.10
C	0.60	0.80
D	19.60	20.60
D1	18.50	19.50
E	29.00	31.00
E1	28.50	29.50
e	9.50	10.50
e1	7.00	8.00
L	16.60	18.00
L1	3.00	4.20
L2	10.80	11.80
ϕP	3.10	3.80
$\phi P1$	5.10	5.90

Dimensions in millimeters

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