



GBJ20005 THRU GBJ2010

20.0AMP Glass Passivated Bridge Rectifier

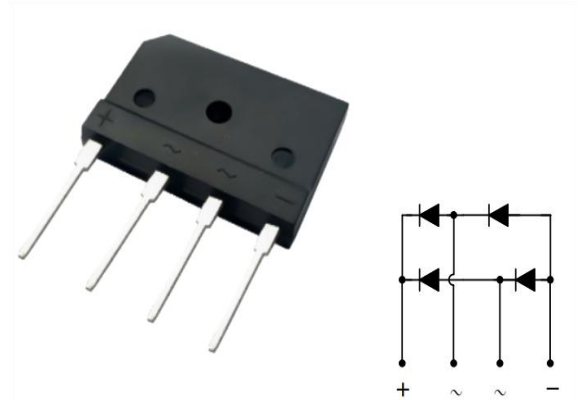
1.Features

- Glass Passivated Die Construction
- Low forward voltage drop
- High surge current capability
- High current capability

GBJ

2.Mechanical Data

- Case:Molded Plastic,GBJ
- Epoxy:UL 94V-0 rate flame retardant.
- Terminals:Plated Leads Solderable per MIL-STD-750,Method-2026
- Marking:marked on body



3.Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified Single phase,half wave,60Hz,resistive or inductive load
For capacitive load derate current by 20%

Type Number		Symbol	GBJ 20005	GBJ 2001	GBJ 2002	GBJ 2004	GBJ 2006	GBJ 2008	GBJ 2010	Unit
Peak Repetitive Reverse Voltage		V _{RRM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage		V _{DC}								
RMS Reverse Voltage		V _{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current	(with heatsink)@T _C =100 °C	I _{F(AV)}	20							A
	(without heatsink)@T _A =25 °C		3.5							
Non-Repetitive Peak Forward Surge Current @T _J =25 °C		I _{FSM}	320							A
8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) @T _J =125 °C			256							
I ² t Rating for fusing (t <8.3ms)		I ² t	425							A ² s
Forward Voltage per element @I _F =10A		V _{FM}	1.0							V
@I _F =20A			1.1							
Peak Reverse Current @T _J =25 °C		I _R	5							uA
At Rated DC Blocking Voltage @T _J =125 °C			200							
Dielectric Strength		V _{ids}	2500							V
The proposed installation torque Max torque		T _{or}	Typ.5 Max.8							Kgf.cm
Typical Junction Capacitance (Note 1)		C _J	75							pF
Typical Thermal Resistance		R _{θJA}	22							°C/W
		R _{θJL}	2							
		R _{θJC}	1.5							
Operating Temperature Range		T _J	-55 to+150							°C
Storage Temperature Range		T _{STG}	-55 to+150							°C

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C



4. Rating And Characteristic Curves

Fig. 1 Forward Current Derating Curve

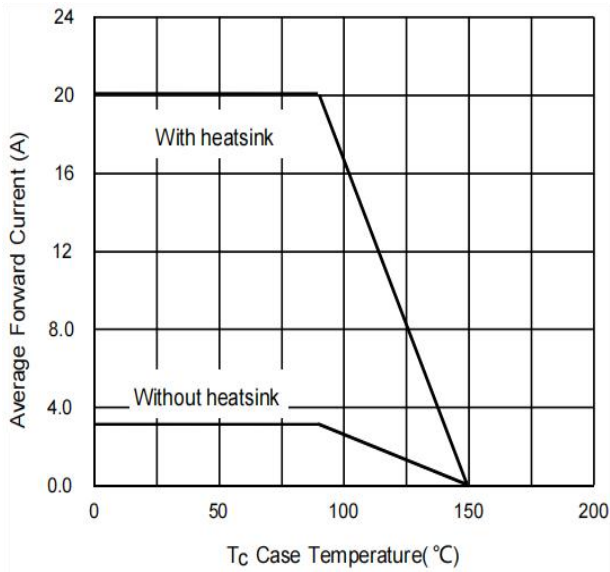


Fig. 2 Typ. Forward Characteristics

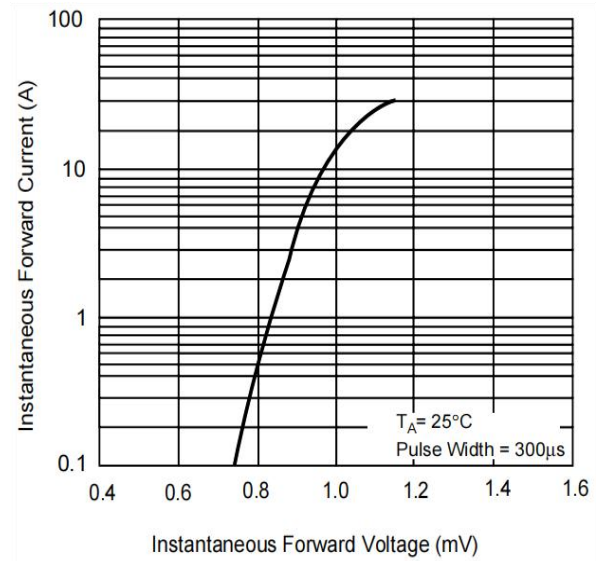


Fig.3 Forward Surge Current Capability

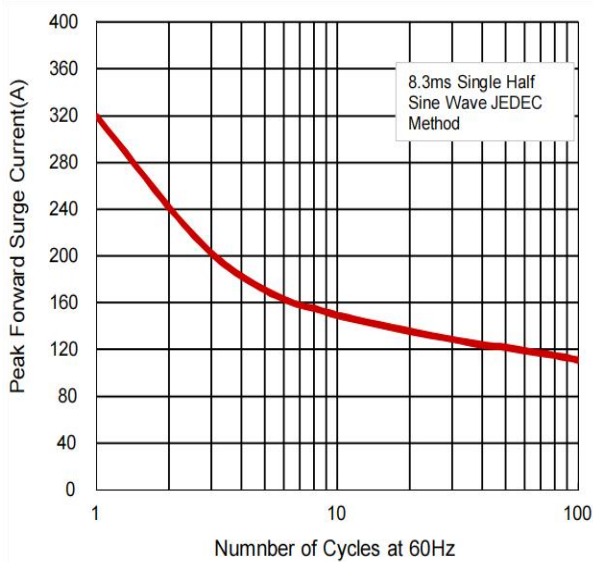
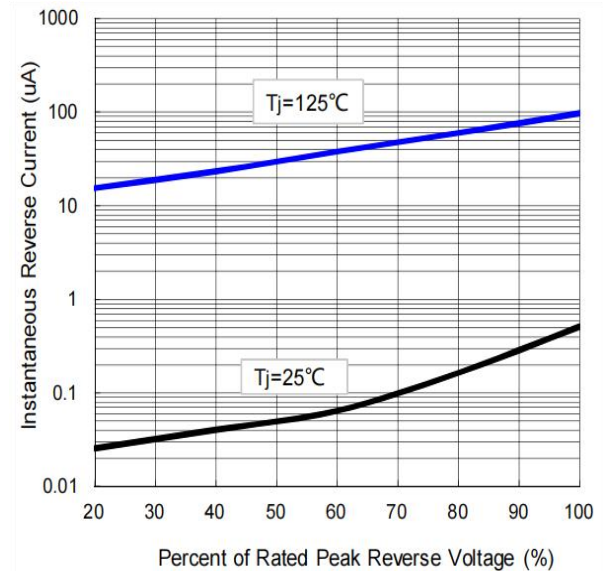


Fig.4 Typical Reverse Characteristics

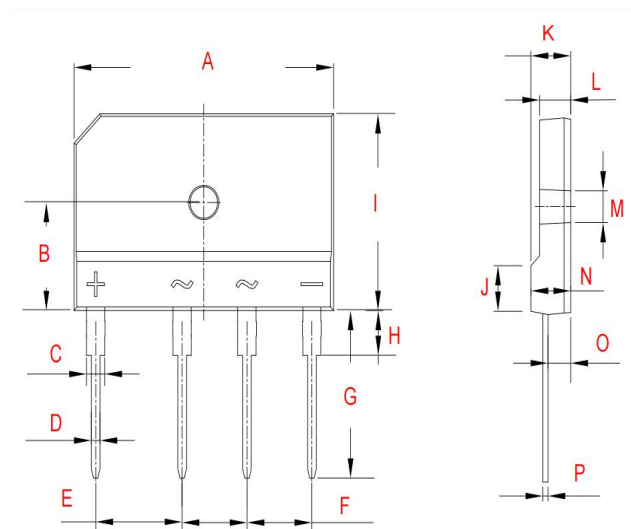




GBJ20005 THRU GBJ2010

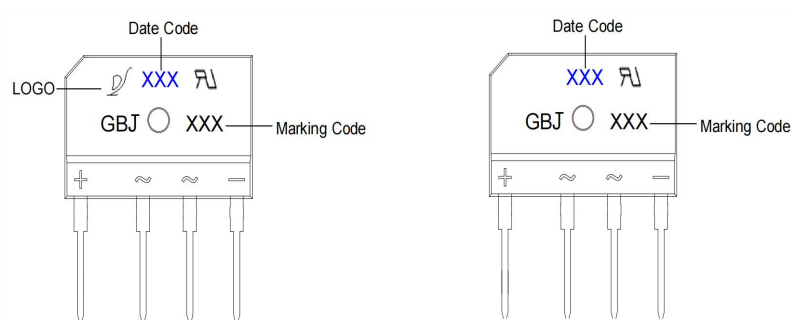
20.0AMP Glass Passivated Bridge Rectifier

5. Dimensions



Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	1.169	1.193	29.70	30.30
B	0.425	0.441	10.80	11.20
C	0.075	0.091	1.90	2.30
D	0.035	0.043	0.90	1.10
E	0.354	0.433	9.00	11.00
F	0.287	0.303	7.30	7.70
G	0.669	0.709	17.00	18.00
H	0.150	0.165	3.80	4.20
I	0.776	0.799	19.70	20.30
J	0.189	0.205	4.80	5.20
K	0.173	0.189	4.40	4.80
L	0.134	0.150	3.40	3.80
M	0.122	0.134	3.10	3.40
N	0.173	0.189	4.40	4.80
O	0.094	0.110	2.40	2.80
P	0.020	0.028	0.50	0.70

6. Part Marking System



7. Package Information

Package	Miniimum Package (pcs)	InnerBox Quantity(pcs)	OuterCarton Quantity(pcs)	Delivery Mode
GBJ	15	180	1800	Tube



Important Notice and Disclaimer

- Reproducing and modifying information of the document is prohibited without from XINNUO.
- XINNUO reserves the right to make changes to this document and its products and specifications.
- XINNUO disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- XINNUO does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the here in document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. XINNUO makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown her are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify XINNUO for any damages resulting from such improper use or sale.
- Since XINNUO uses lot number as the tracking base, please provide the lot number for tracking when complaining.