



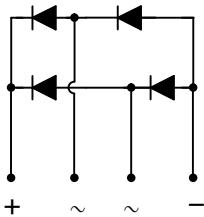
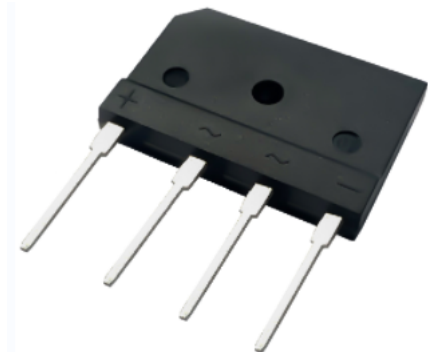
# GBJ25005I THRU GBJ2510I

25.0AMP Glass Passivated Bridge Rectifier

## 1. Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge 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

Electrical Characteristics Rating at 25°C ambient temperature unless otherwise specified.

PARAMETER		SYMBOL	GBJ25005I	GBJ2501I	GBJ2502I	GBJ2504I	GBJ2506I	GBJ2508I	GBJ2510I	UNIT
		Code	GBJ25005	GBJ2501	GBJ2502	GBJ2504	GBJ2506	GBJ2508	GBJ2510	
Maximum Recurrent Peak Reverse Voltage		V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage		V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Average Rectified Output Current	(with heatsink) @T <sub>C</sub> =100 °C (without heatsink)@T <sub>A</sub> =25 °C	I <sub>F(AV)</sub>	25 4.0							A
Peak Forward Surge Current 8.3ms @T <sub>J</sub> =25 °C Single half sine-wave superimposed @T <sub>J</sub> =125 °C on rated load (JEDEC Method)		I <sub>FSM</sub>	350 280							A
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)		I <sup>2</sup> t	508							A <sup>2</sup> S
Maximum Instantaneous Forward Voltage @I <sub>F</sub> =12.5A		V <sub>FM</sub>	1.0							V
Maximum DC reverse current @T <sub>J</sub> =25 °C at rated DC blocking voltage @T <sub>J</sub> =125 °C		I <sub>R</sub>	5.0 200							uA
Dielectric Strength		V <sub>ids</sub>	2500							V
The proposed installation torque Max torque		T <sub>or</sub>	Typ. 5.0 Max 8.0							Kgf.cm
Typical Junction Capacitance (Note 1)		C <sub>j</sub>	110							pF
Typical Thermal Resistance		R <sub>θJA</sub>	18							°C/W
		R <sub>θJL</sub>	1.5							
		R <sub>θJC</sub>	1.0							
Operating Temperature Range		T <sub>j</sub>	-55 to+150							°C
Storage Temperature Range		T <sub>STG</sub>	-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

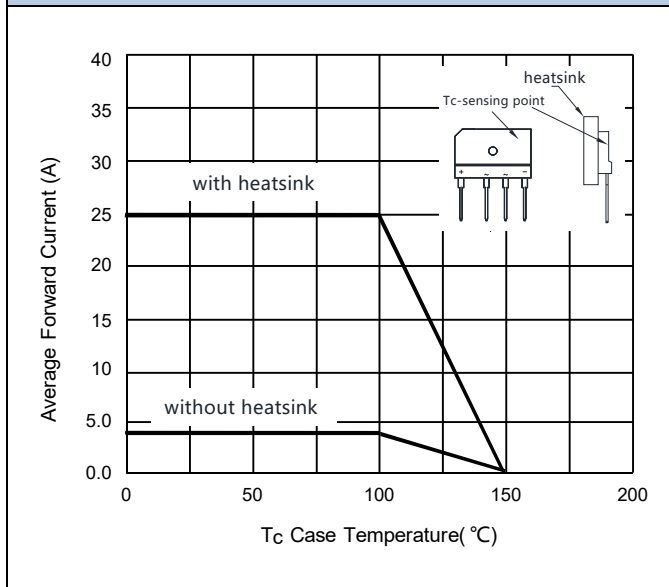


Fig. 2 Typical Forward Characteristics

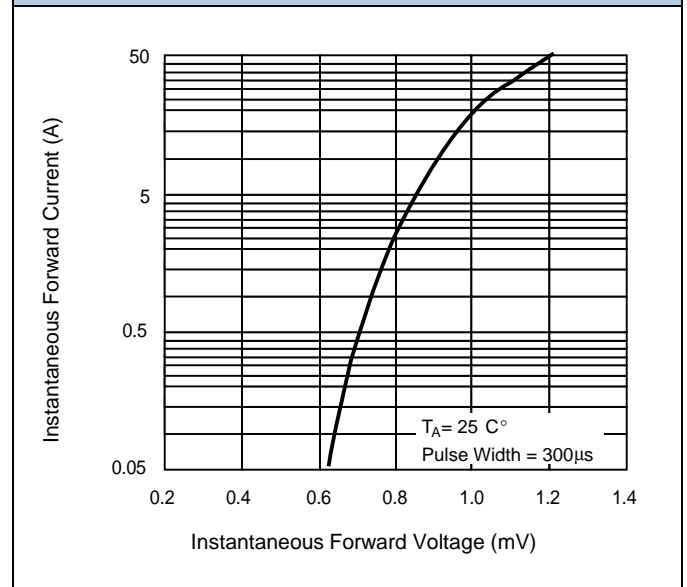


Fig. 3 Forward Surge Current Capability

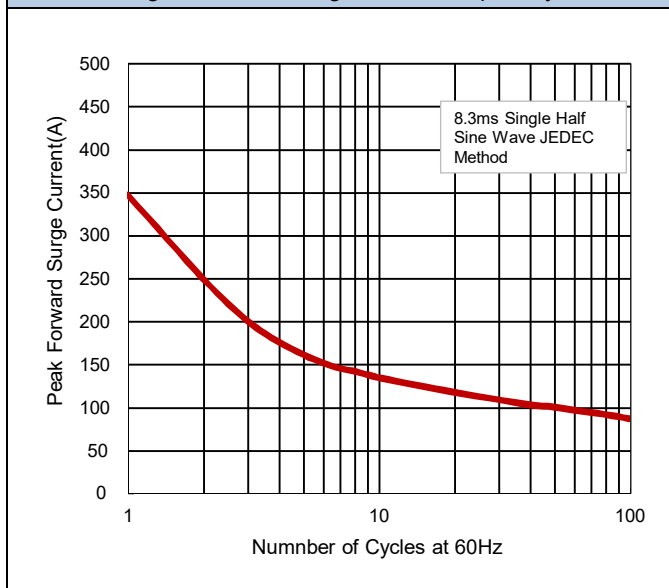
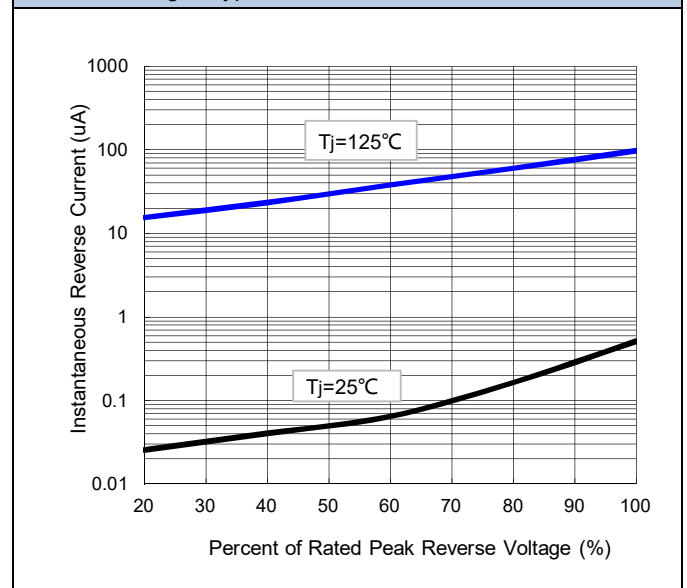


Fig.4 Typical Reverse Characteristics

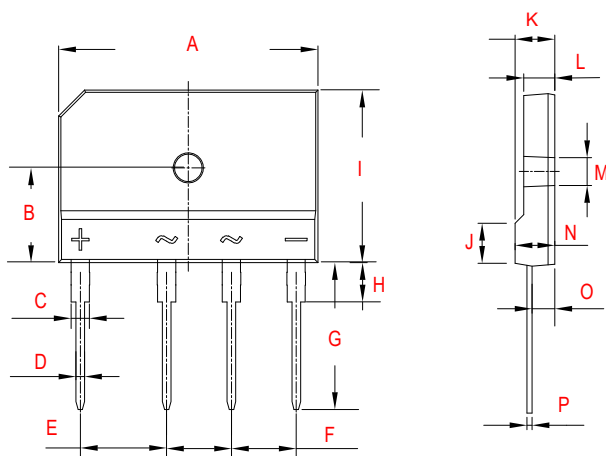




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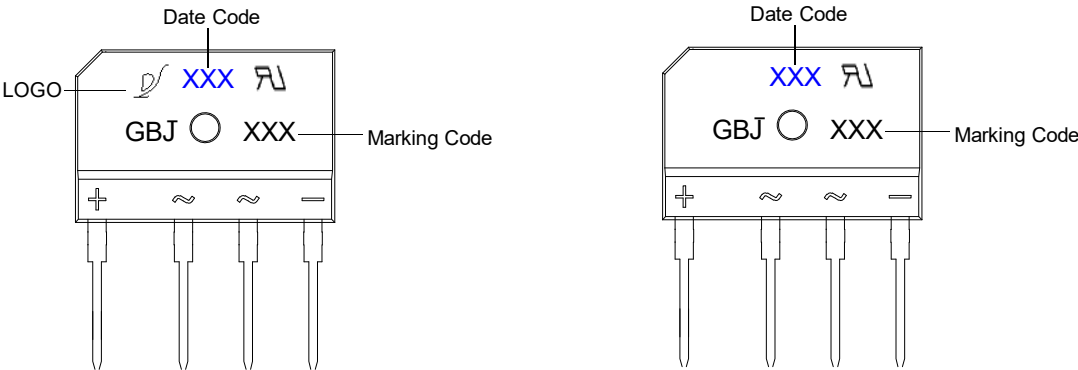
25.0AMP Glass Passivated Bridge Rectifier

## 5. Dimensions



Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	1.169	1.193	29.7	30.3
B	0.425	0.441	10.8	11.2
C	0.075	0.091	1.9	2.3
D	0.035	0.043	0.9	1.1
E	0.354	0.433	9.0	11.0
F	0.287	0.303	7.3	7.7
G	0.699	0.709	17.0	18.0
H	0.150	0.165	3.8	4.2
I	0.776	0.799	19.7	20.3
J	0.189	0.205	4.8	5.2
K	0.173	0.189	4.4	4.8
L	0.134	0.150	3.4	3.8
M	0.122	0.134	3.1	3.4
N	0.173	0.189	4.4	4.8
O	0.094	0.110	2.4	2.8
P	0.020	0.028	0.5	0.7

## 6. Part Marking System



## 7. Package Information

Package	Miniimum Package (pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
GBJ	15	180	1800	Tube



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