



## 1. Features

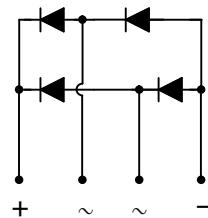
- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability

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	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	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					A
4.0										
Peak Forward Surge Current 8.3ms @T <sub>j</sub> =25°C	I <sub>FSM</sub>				350					A
Single half sine-wave superimposed on rated load (JEDEC Method) @T <sub>j</sub> =125°C					280					
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					uA
					200					
Dielectric Strength	V <sub>IDS</sub>				2500					V
The proposed installation torque	T <sub>or</sub>				Typ. 5.0					Kgf.cm
Max torque					Max 8.0					
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

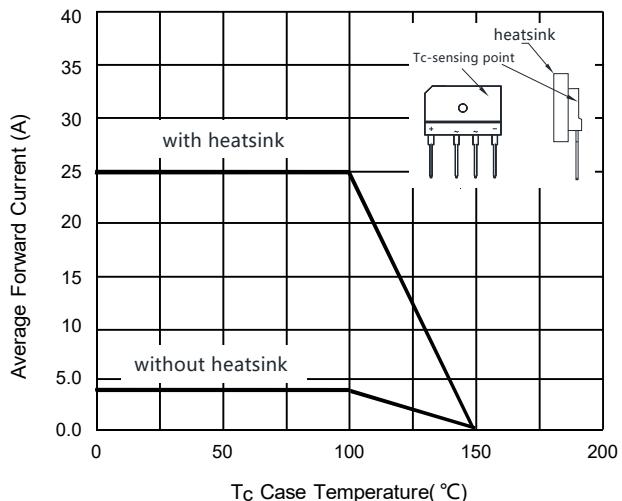


Fig. 2 Typical Forward Characteristics

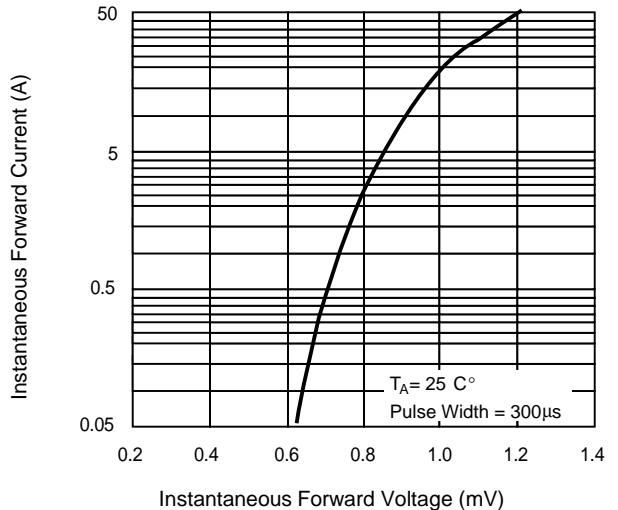


Fig. 3 Forward Surge Current Capability

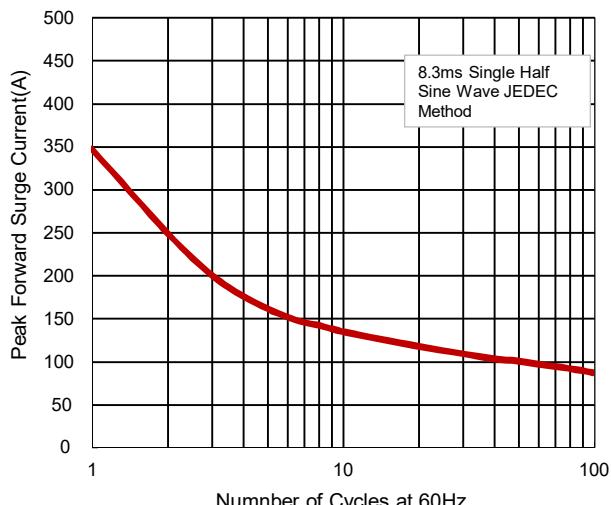
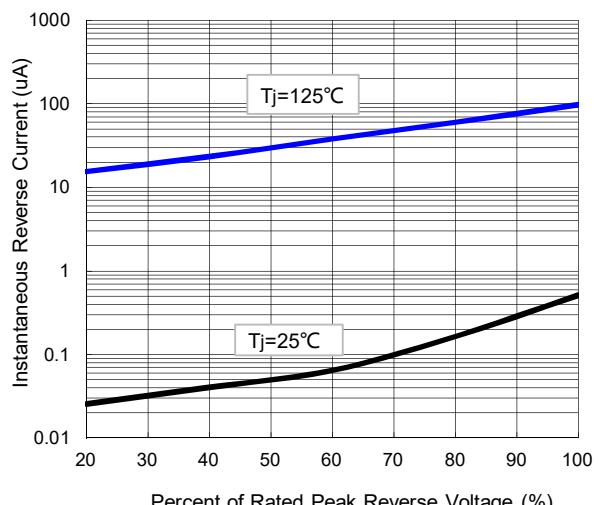
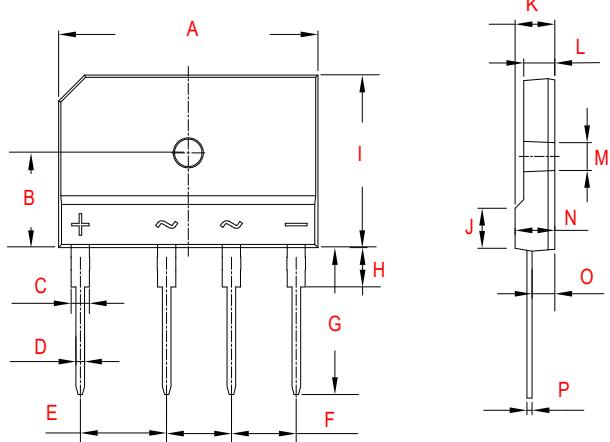


Fig. 4 Typical Reverse Characteristics



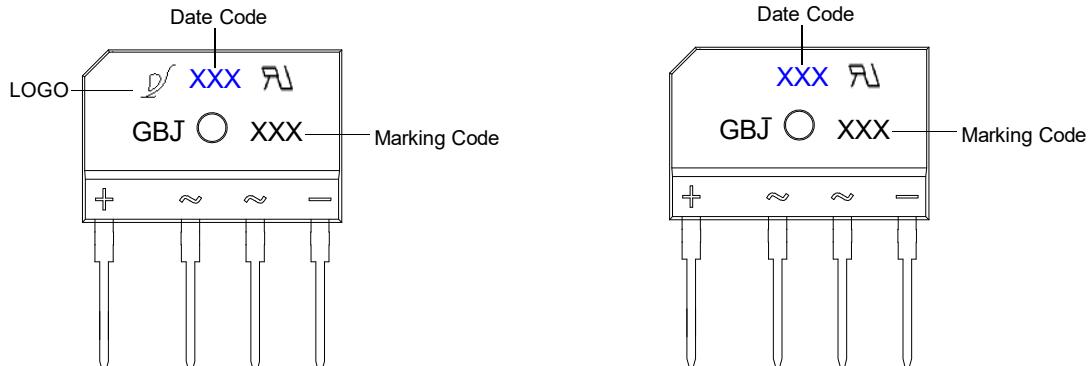


## 5. Dimensions



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



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