

# GBJ10005 THRU GBJ1010

## Bridge Rectifiers

### Features

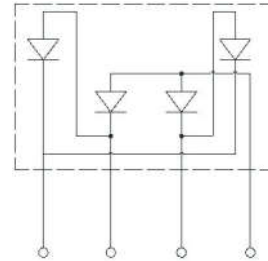
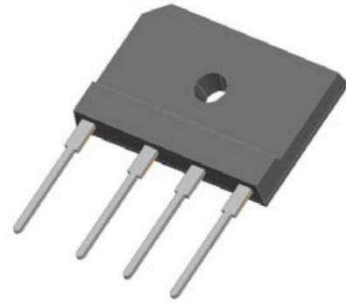
- High efficiency
- Ideal for automated placement
- High surge current capability

### Typical Applications

General purpose use in AC/DC bridge full wave rectification for power supply, lighting ballast, battery charger, home appliances, office equipment, and telecommunication applications.

### Mechanical Data

- Package: GBJ
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: As marked on body.



### ■ Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	Unit	GBJ10						
			005	01	02	04	06	08	10
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	V <sub>RMS</sub>	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	V <sub>DC</sub>	V	50	100	200	400	600	800	1000
Average Forward Current @Half-sine wave, Resistance load With heatsink T <sub>c</sub> =80°C	I <sub>o</sub>	A	10						
Average Forward Current @Half-sine wave, Resistance load Without heatsink T <sub>a</sub> =25°C			3.6						
Forward Surge Current (Non-repetitive) @60HZ sine wave, 1 cycle, T <sub>a</sub> =25°C	I <sub>FSM</sub>	A	170						
Current squared time @1ms≤t≤8.3ms T <sub>a</sub> =25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> s	120						
Thermal Resistance(Typical) @Between junction and ambient, Without heatsink	R <sub>θJ-A</sub>	°C/W	25						
Storage Temperature	T <sub>stg</sub>	°C	-55 ~ +150						
Junction Temperature	T <sub>j</sub>	°C	-55 ~ +150						

### ■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	Unit	Conditions	GBJ10					
				005	01	02	04	06	08
Peak Forward Voltage	V <sub>FM</sub>	V	I <sub>F</sub> =5.0A	1.1					
Peak Reverse Current	I <sub>RRM</sub>	μA	VR =V <sub>DC</sub> @Ta=25°C	10					
			VR =V <sub>DC</sub> @Ta=100°C	300					



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## ■ Characteristics (Typical)

FIG.1:  $I_o$ - $T_c$  Curve

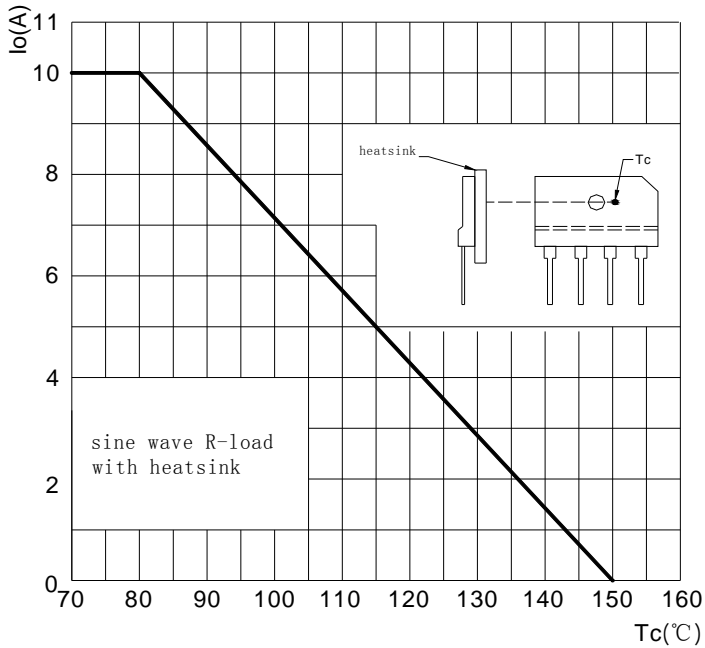


FIG.2: Forward Surge Current Capability

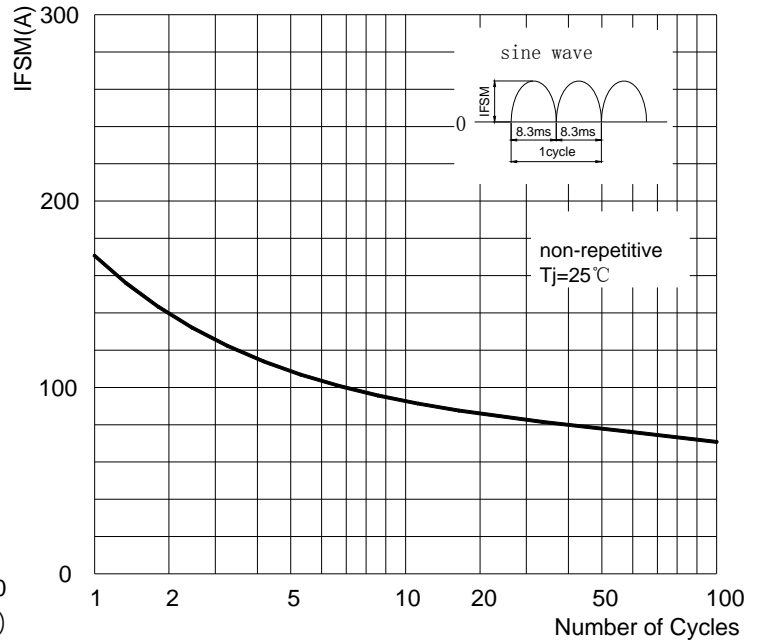


FIG.3: Forward Voltage

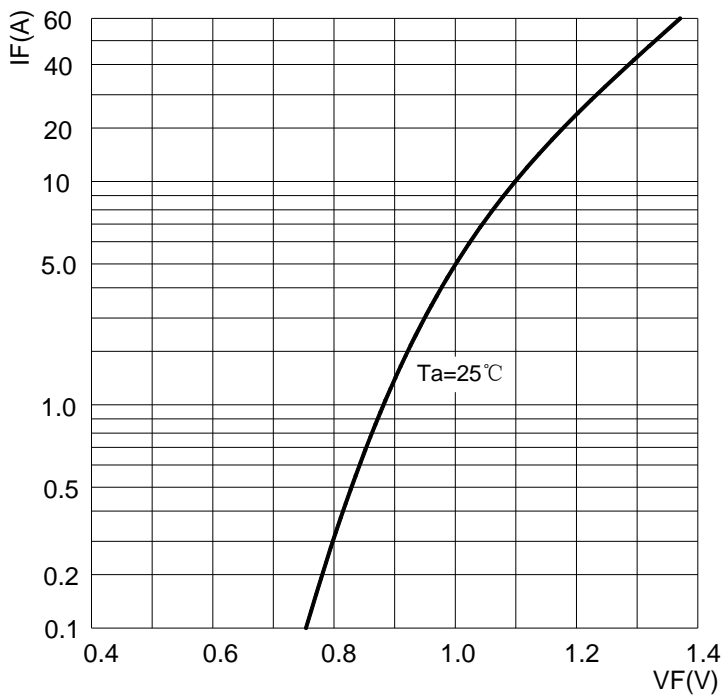
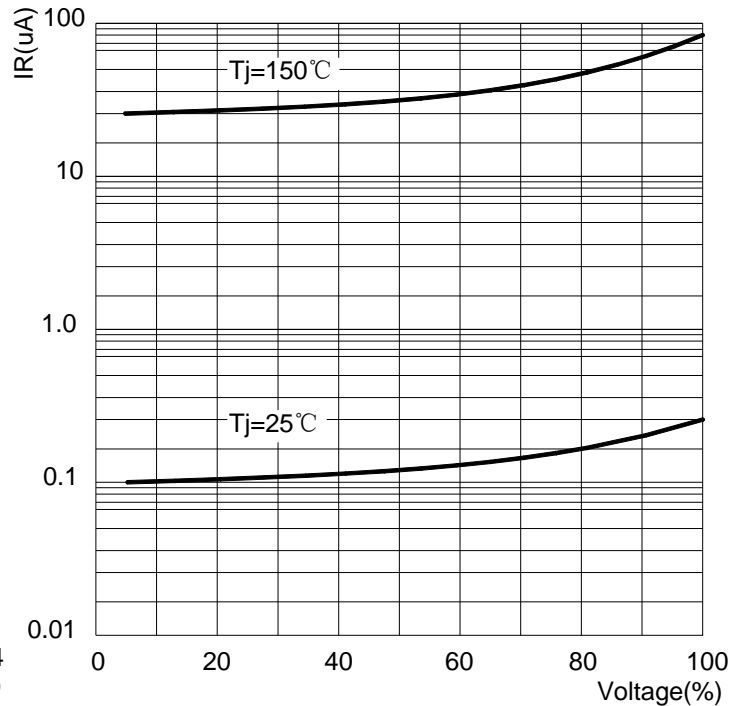


FIG.4: Typical Reverse Characteristics



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## Ordering Information (Example)

PREFERRED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBJ10005 THRU GBJ1010	GBJ	150	300	1500	Tube

## Outline Dimensions

