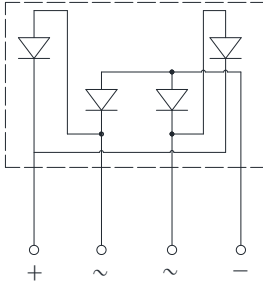
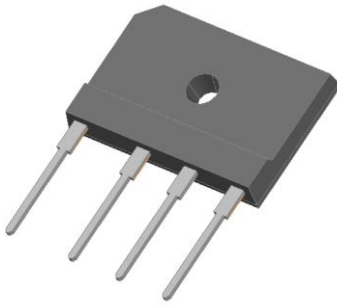


## Bridge Rectifiers



### Features

- UL recognition, file #E230084
- Thin single in-line package
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### Typical Applications

General purpose use in AC/DC bridge full wave rectification for switching power supply, home appliances, office equipment, industrial automation applications.

### Mechanical Data

- **Package:** 6KBJ  
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 (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GBJ10005	GBJ1001	GBJ1002	GBJ1004	GBJ1006	GBJ1008	GBJ1010
Device marking code			GBJ10005	GBJ1001	GBJ1002	GBJ1004	GBJ1006	GBJ1008	GBJ1010
Repetitive peak reverse voltage	V <sub>RRM</sub>	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load	With heatsink T <sub>C</sub> =87°C	I <sub>O</sub>	A	10					
	Without heatsink T <sub>a</sub> =25°C			3.5					
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T <sub>J</sub> =25°C	I <sub>FSM</sub>	A	175						
Current squared time @1ms≤t≤8.3ms T <sub>J</sub> =25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> S	127						
Storage temperature	T <sub>stg</sub>	°C	-55 ~+150						
Junction temperature	T <sub>J</sub>	°C	-55 ~+150						
Dielectric strength @ terminals to case, AC 1 minute	V <sub>dis</sub>	KV	2						
Mounting torque @recommend torque: 5kg·cm	Tor	kg·cm	8						

### ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBJ10005	GBJ1001	GBJ1002	GBJ1004	GBJ1006	GBJ1008	GBJ1010
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =5A	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	μA	V <sub>RM</sub> =V <sub>RRM</sub>	5						



# GBJ1005 THRU GBJ1010

## ■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBJ1005	GBJ1001	GBJ1002	GBJ1004	GBJ1006	GBJ1008	GBJ1010
Thermal Resistance	Between junction and ambient, Without heatsink	R <sub>θJ-A</sub>	°C/W	25						
	Between junction and case, With heatsink	R <sub>θJ-C</sub>		2.3						

## ■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBJ1005 THRU GBJ1010	B1	Approximate 6.5	15	750	1500	TUBE
GBJ1005 THRU GBJ1010	A1	Approximate 6.5	250	250	2000	BOX

## ■ Characteristics(Typical)

FIG1: I<sub>o</sub>-T<sub>c</sub> Curve

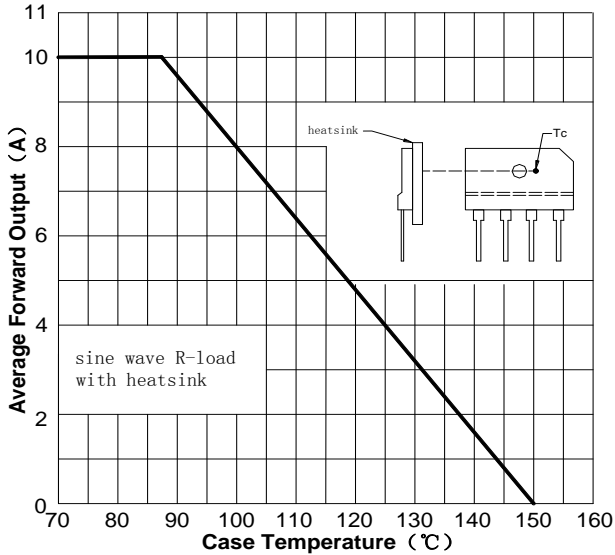


FIG2: Surge Forward Current Capability

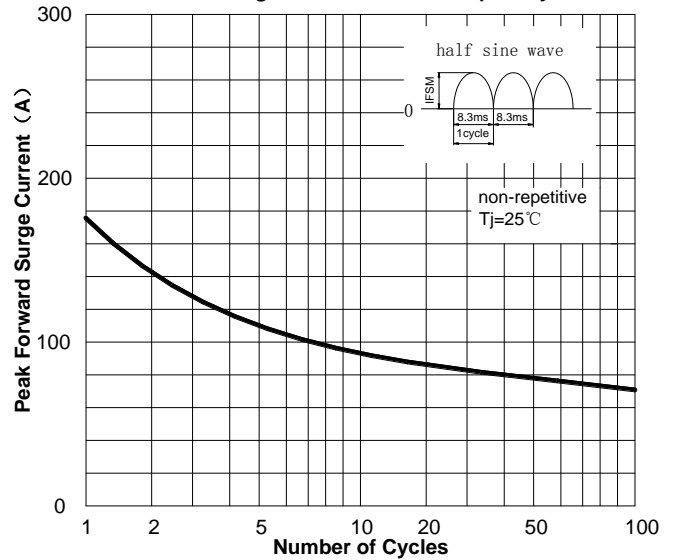


FIG3: Forward Voltage

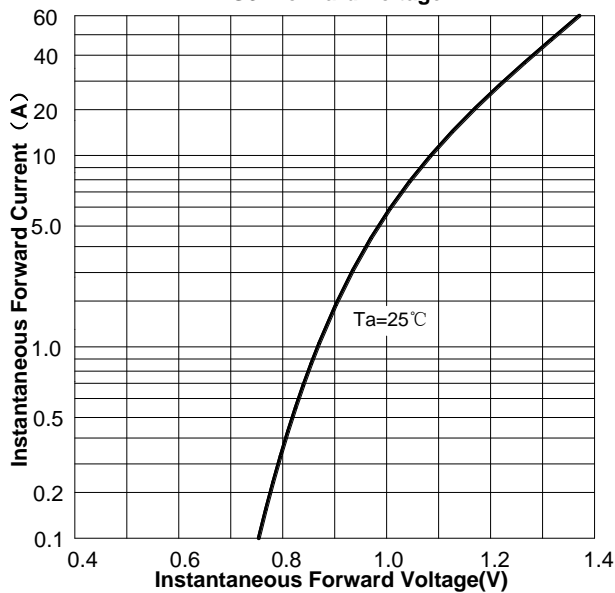
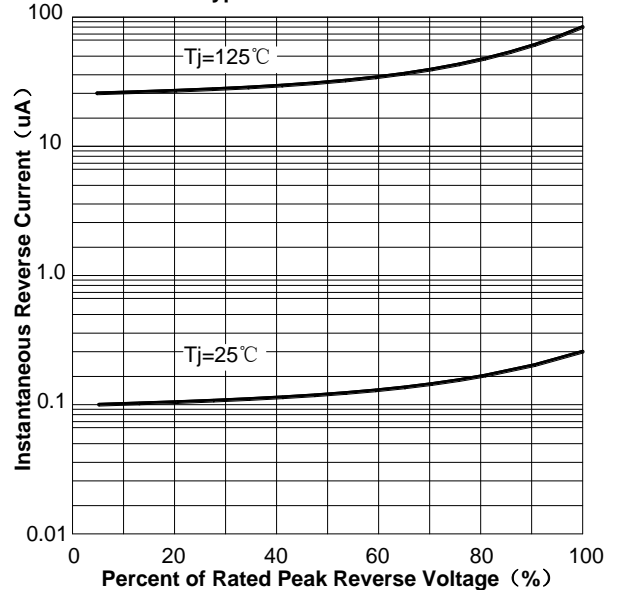
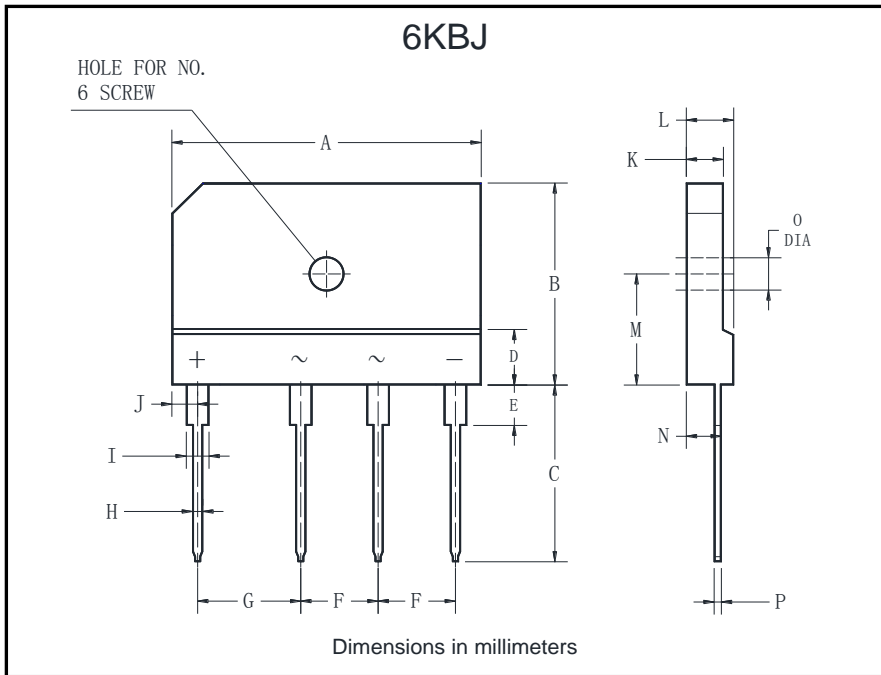


FIG4: Typical Reverse Characteristics





■ Outline Dimensions



6KBJ		
Dim	Min	Max
A	29.7	30.3
B	19.7	20.3
C	17.0	18.0
D	4.8	5.8
E	3.8	4.2
F	7.3	7.7
G	9.8	10.2
H	0.9	1.1
I	2.0	2.4
J	2.3	2.7
K	3.4	3.8
L	4.4	4.8
M	10.8	11.2
N	3.1	3.7
O	3.1	3.4
P	0.6	0.8



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