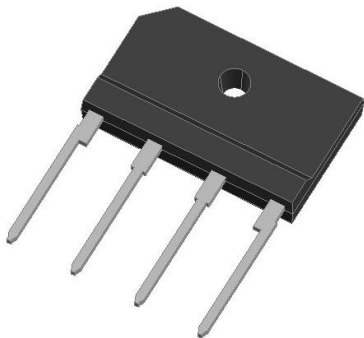


## Bridge Rectifiers

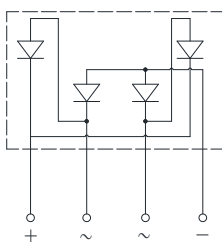


### Features

- 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:** 4KBJ  
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)

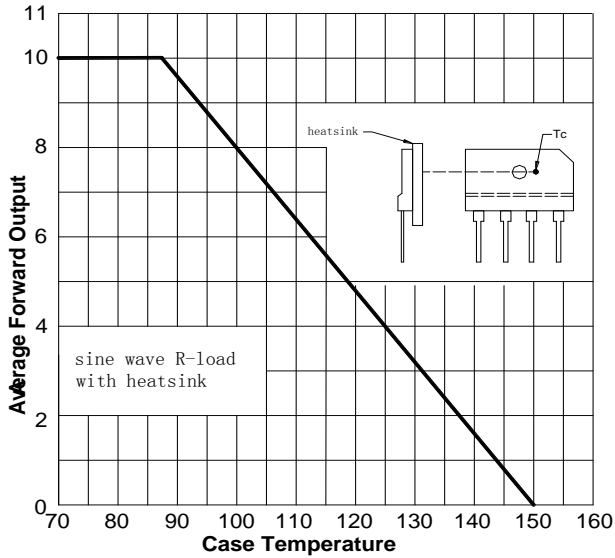
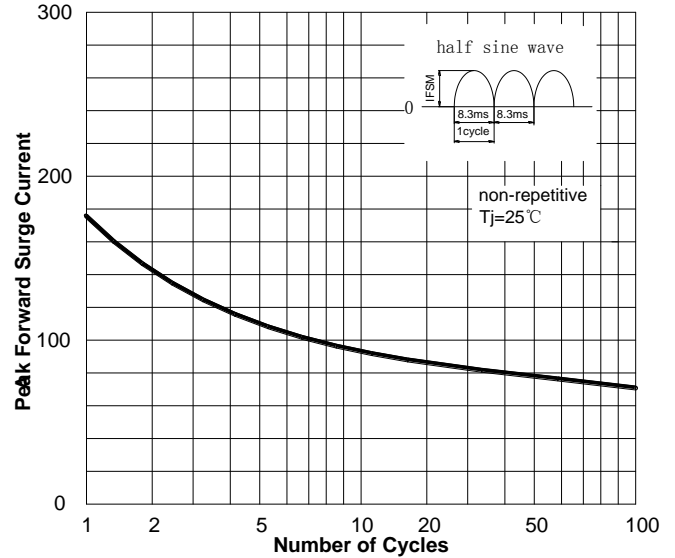
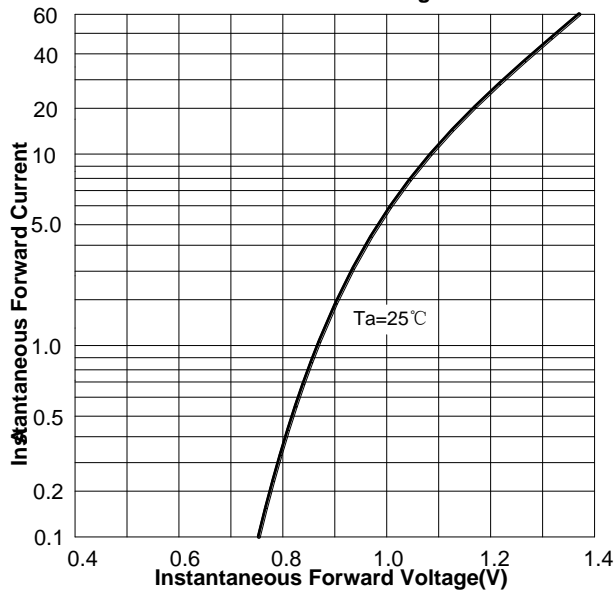
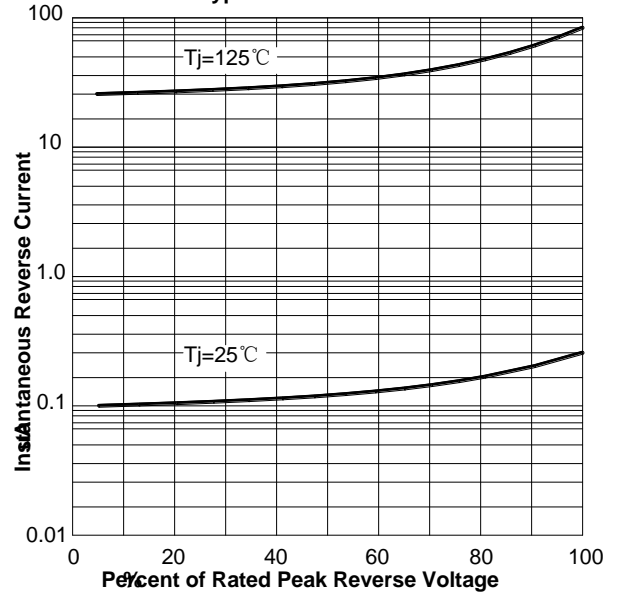
PARAMETER	SYMBOL	UNIT	GBJ10005	GBJ1001	GBJ1002	GBJ1004	GBJ1006	GBJ1008	GBJ1010
Device marking code			GBJ10005	GBJ1001	GBJ1002	GBJ1004	GBJ1006	GBJ1008	GBJ1010
Repetitive peak reverse voltage	VRRM	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load	IO	With heatsink T <sub>c</sub> =87°C	10.0						
		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	IFSM	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	2.5						
Mounting torque @recommend torque: 5kg·cm	Tor	kg·cm	8						

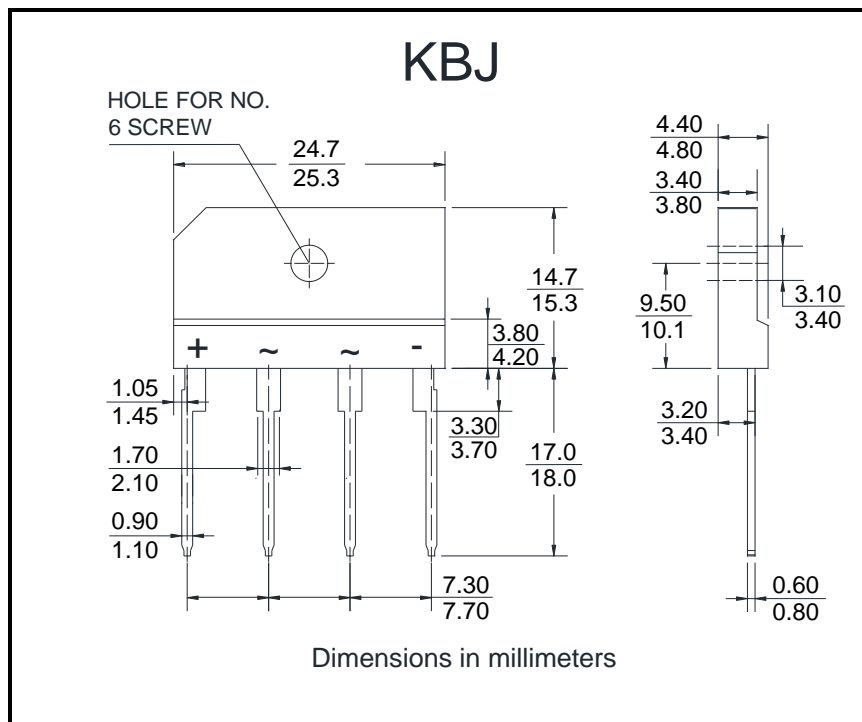
### ■Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBJ10005	GBJ1001	GBJ1002	GBJ1004	GBJ1006	GBJ1008	GBJ1010
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	IFM=5.0A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	μA	VRM=VRRM	5						

**Thermal Characteristics** ( $T_a=25^{\circ}\text{C}$  Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBJ10005	GBJ1001	GBJ1002	GBJ1004	GBJ1006	GBJ1008	GBJ1010
Thermal Resistance	Between junction and ambient, Without heatsink	$R_{\theta J-A}$	$^{\circ}\text{C/W}$	25.0						
	Between junction and case, With heatsink	$R_{\theta J-C}$		2.3						

**Characteristics(Typical)**
**FIG1:Io-Tc Curve**

**FIG2: Surge Forward Current Capability**

**FIG3: Forward Voltage**

**FIG4: Typical Reverse Characteristics**


**■ Outline Dimensions**


4KBJ		
Dim	Min	Max
A		
B	1.05	1.45
C	1.7	2.1
D	0.9	1.1
E	7.3	7.7
F	14.7	15.3
G	3.8	4.2
H	3.3	3.7
I	3.1	3.4
J	4.4	4.8
K	3.4	3.8
L	3.2	3.4
M	0.6	0.8
N	17.0	18.0
O	9.5	10.1