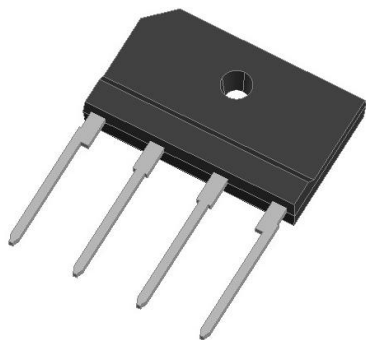


Bridge Rectifiers

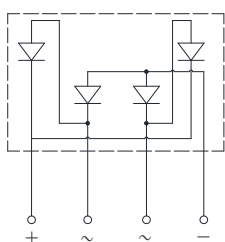


Features

- 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_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GBJ8005	GBJ801	GBJ802	GBJ804	GBJ806	GBJ808	GBJ810
Device marking code			GBJ8005	GBJ801	GBJ802	GBJ804	GBJ806	GBJ808	GBJ810
Repetitive peak reverse voltage	VRRM	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load	With heatsink T _c =87°C	I _O	A	8.0					
	Without heatsink T _a =25°C			3.5					
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T _j =25°C	IFSM	A	175						
Current squared time @ 1ms≤t≤8.3ms T _j =25°C, Rating of per diode	I ² t	A ² s	127						
Storage temperature	T _{stg}	°C	-55 ~+150						
Junction temperature	T _j	°C	-55 ~+150						
Dielectric strength @ terminals to case, AC 1 minute	V _{dis}	KV	2.5						
Mounting torque @recommend torque: 5kg·cm	Tor	kg·cm	8						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBJ8005	GBJ801	GBJ802	GBJ804	GBJ806	GBJ808	GBJ810
Maximum instantaneous forward voltage drop per diode	V _F	V	IFM=4.0A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	µA	V _{RM} =VRRM	5						

■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBJ8005	GBJ801	GBJ802	GBJ804	GBJ806	GBJ808	GBJ810
Thermal Resistance	Between junction and ambient, Without heatsink	R _{θJ-A}	°C/W	25.0						
	Between junction and case, With heatsink	R _{θJ-C}		2.3						

■ Characteristics (Typical)

FIG1: I_o-T_c Curve

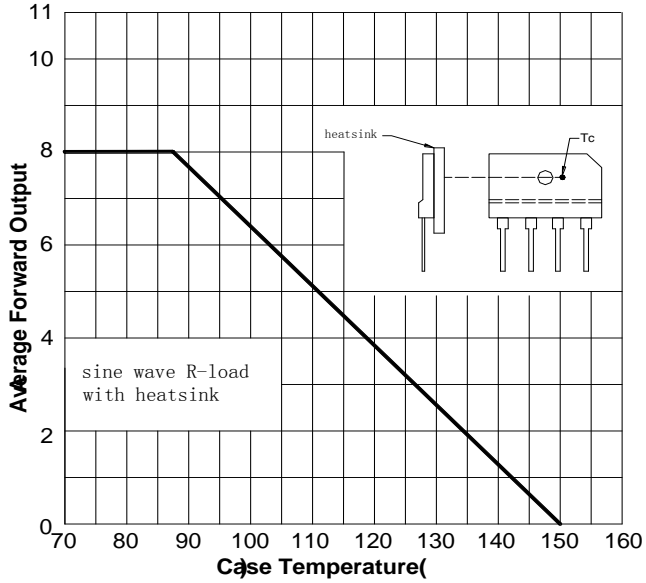


FIG2: Surge Forward Current Capability

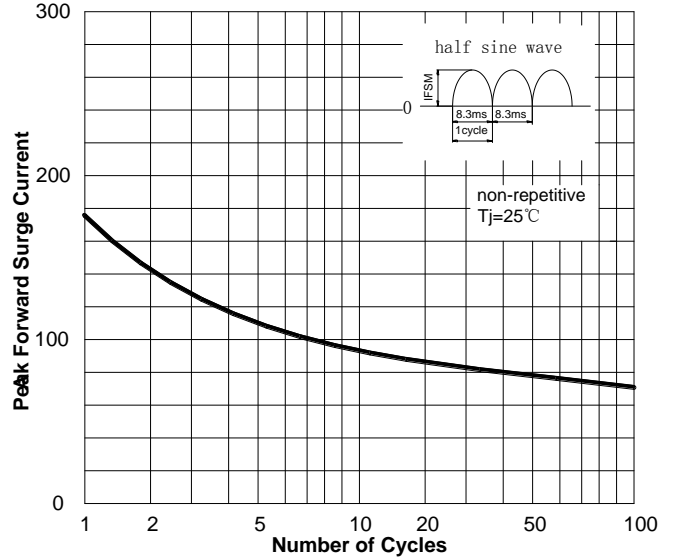


FIG3: Forward Voltage

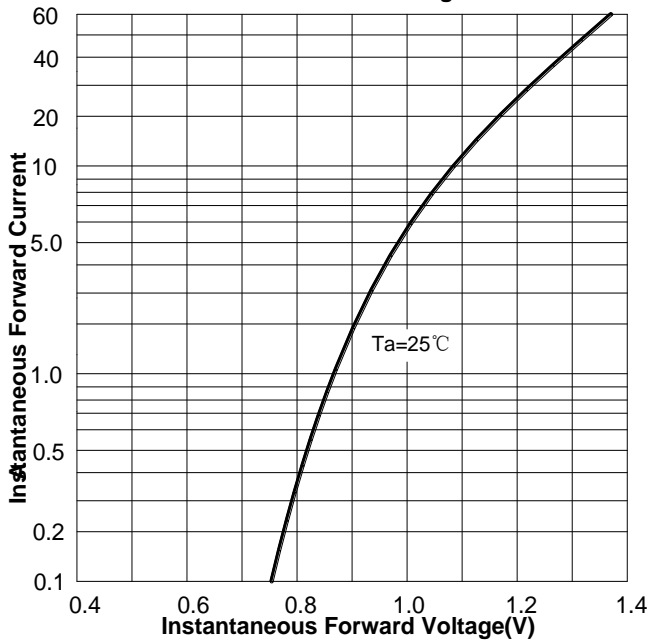
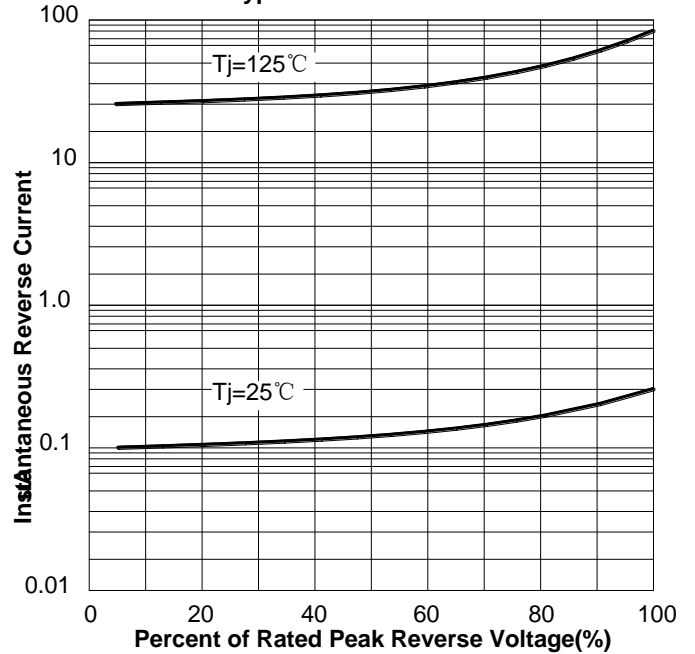
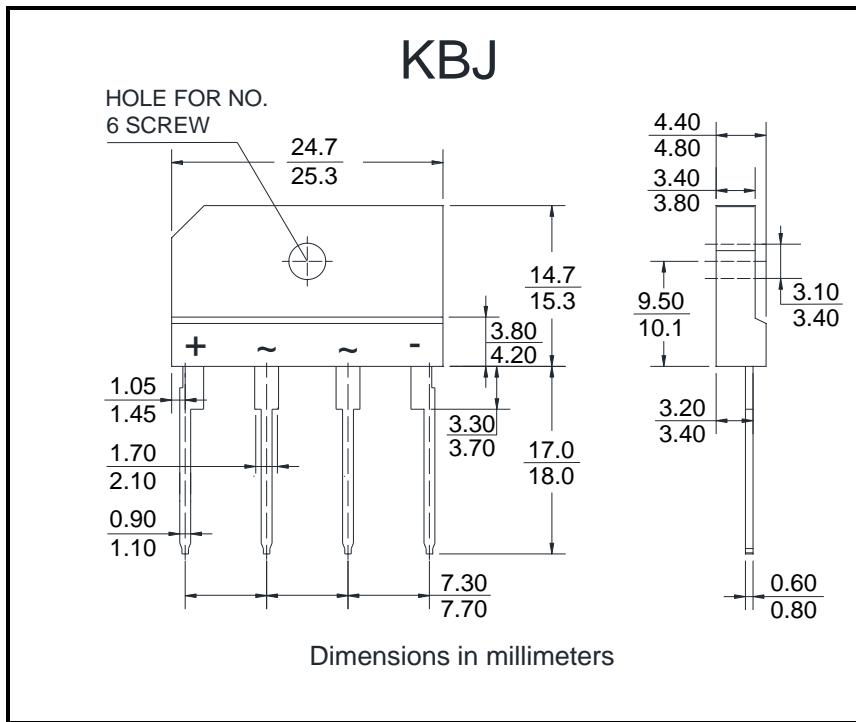


FIG4: Typical Reverse Characteristics



■ 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