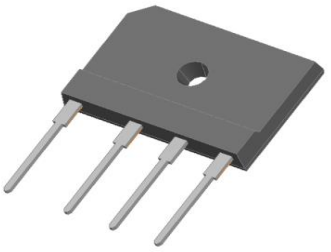
STEIFPOWER TECHNOLOGY

GBJ8005 THRU GBJ810

Bridge Rectifiers

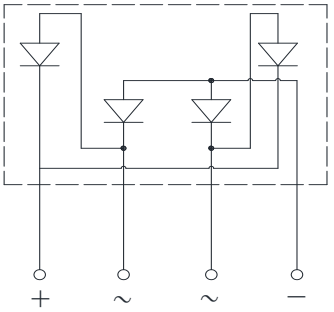
Features

- 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_a=25℃ 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		V_{RRM}	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load	With heatsink T_C =87℃	I_O	A	8.0						
	Without heatsink T_a =25℃			3.5						
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, Tj=25℃		I_{FSM}	A	175						
Current squared time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode		I^2t	A^2s	127						
Storage temperature		T_{stg}	℃	-55 ~+150						
Junction temperature		T_j	℃	-55 ~+150						
Dielectric strength @terminals to case, AC 1 minute		V_{dis}	KV	2						
Mounting torque @recommend torque: 5kg • cm		Tor	kg • cm	8						

■Electrical Characteristics (T_a=25℃ Unless otherwise specified)

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

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	GBJ8005	GBJ801	GBJ802	GBJ804	GBJ806	GBJ808	GBJ810
Thermal Resistance	Between junction and ambient, Without heatsink	RθJ-A	℃/W	25.0						
	Between junction and case, With heatsink	RθJ-C		2.3						

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBJ8005 THRU GBJ810	B1	Approximate 6.5	15	750	1500	TUBE

■ Characteristics (Typical)

FIG1:Io-Tc Curve

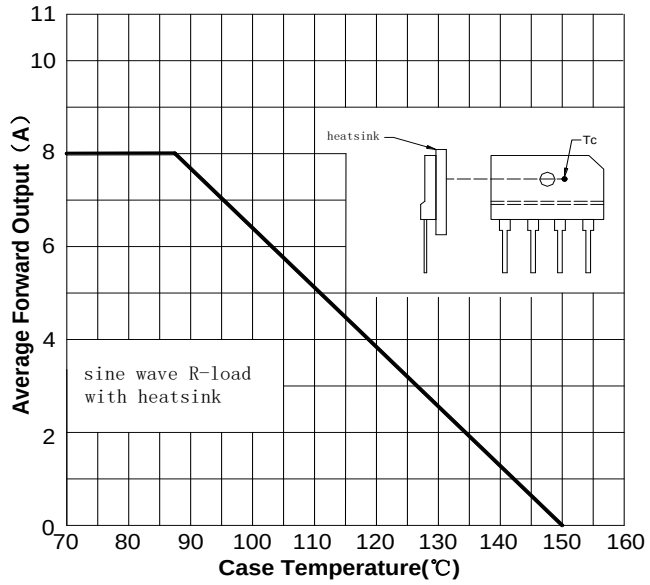


FIG2:Surge Forward Current Capability

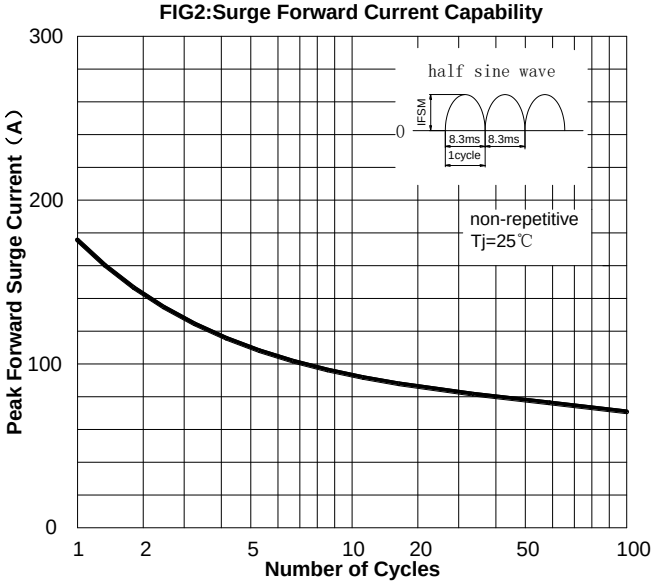


FIG3: Forward Voltage

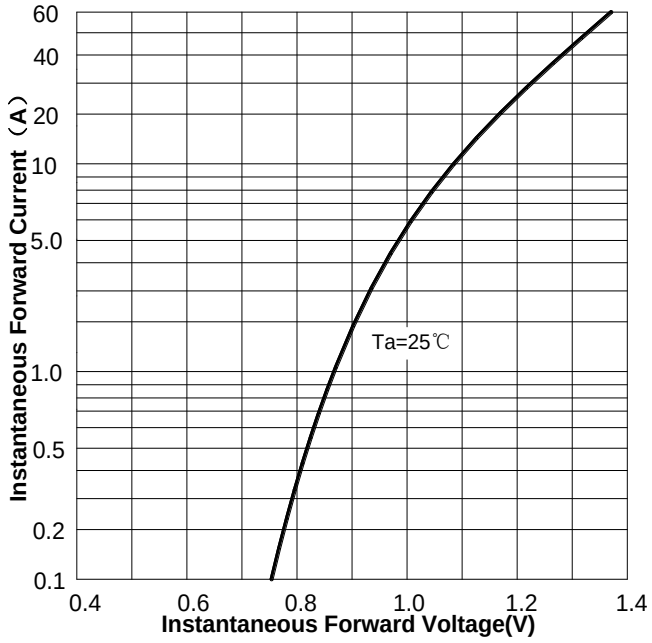
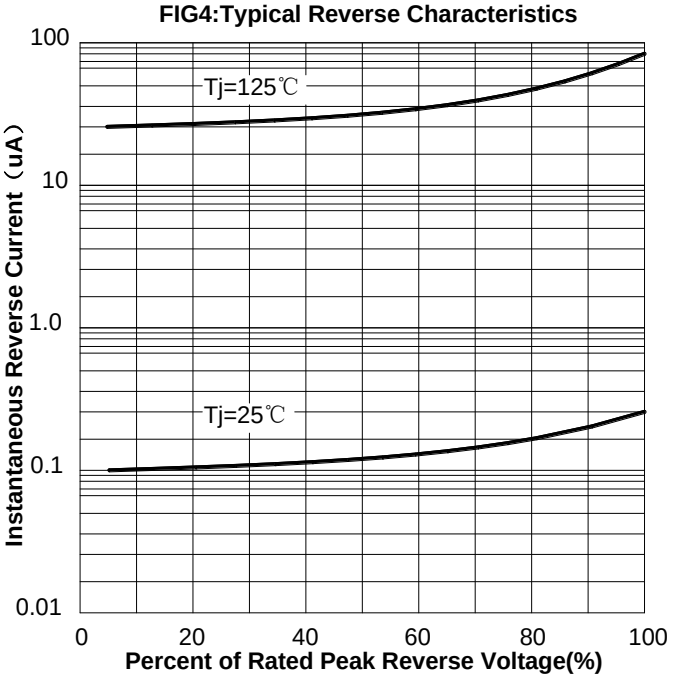
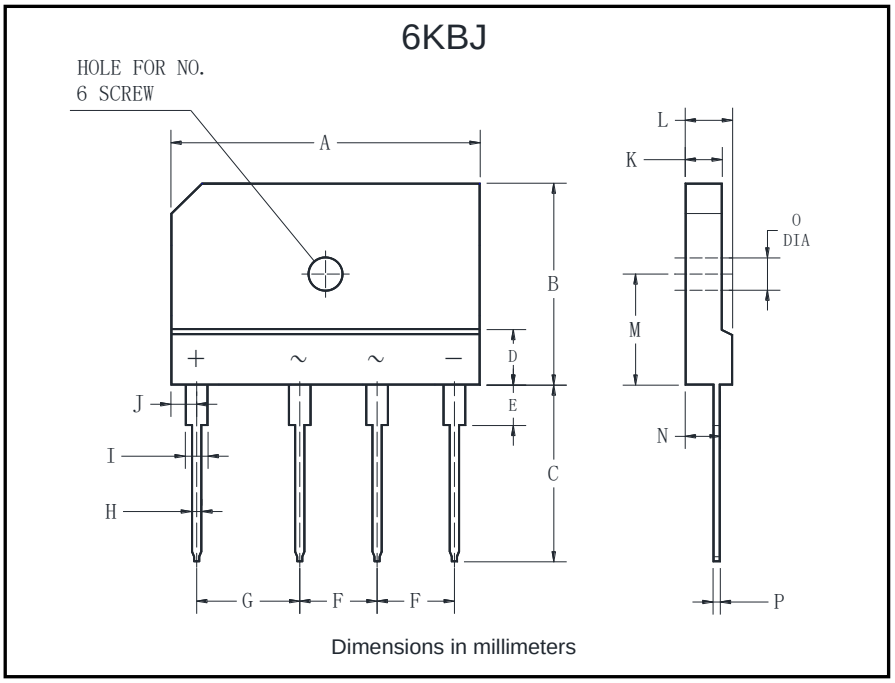


FIG4:Typical Reverse Characteristics



■ 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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