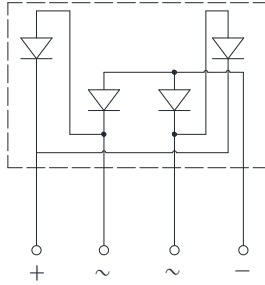
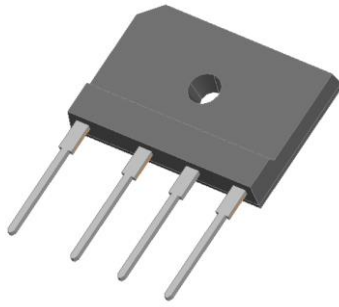


Bridge Rectifiers



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°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBJ50005	GBJ5001	GBJ5002	GBJ5004	GBJ5006	GBJ5008	GBJ5010
Device marking code				GBJ50005	GBJ5001	GBJ5002	GBJ5004	GBJ5006	GBJ5008	GBJ5010
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℃	I _O	A	50						
	Without heatsink T _A =25℃			5.2						
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T _J =25℃		I _{FSM}	A	450						
Current squared time @ 1ms≤t≤8.3ms T _J =25℃, Rating of per diode		I ² t	A ² s	830						
Storage temperature		T _{stg}	℃	-55 ~+150						
Junction temperature		T _J	℃	-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	GBJ50005	GBJ5001	GBJ5002	GBJ5004	GBJ5006	GBJ5008	GBJ5010
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =25A	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	V _{RM} =V _{RRM}	5						



GBJ50005 THRU GBJ5010

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

PARAMETER		SYMBOL	UNIT	GBJ50005	GBJ5001	GBJ5002	GBJ5004	GBJ5006	GBJ5008	GBJ5010
Thermal Resistance	Between junction and ambient, Without heatsink	$R_{\theta J-A}$	$^{\circ}\text{C/W}$	22						
	Between junction and case, With heatsink	$R_{\theta J-C}$		0.8						

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBJ50005 THRU GBJ5010	B1	Approximate 6.5	15	750	1500	TUBE
GBJ50005 THRU GBJ5010	A1	Approximate 6.5	250	250	2000	BOX

■ Characteristics (Typical)

FIG1: I_o - T_c Curve

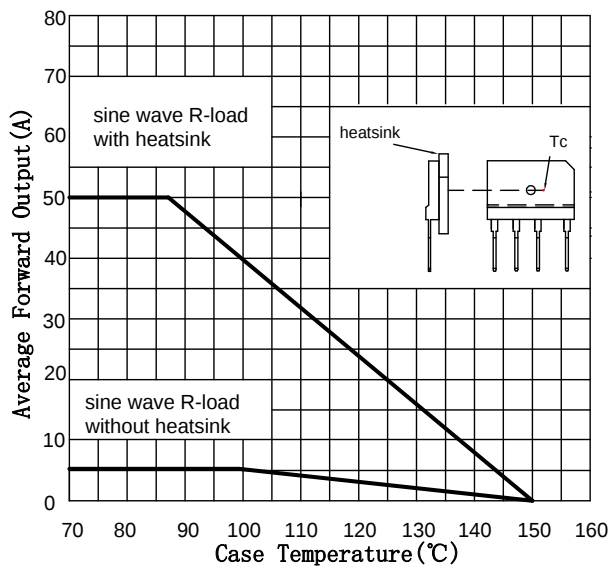


FIG2: Surge Forward Current Capability

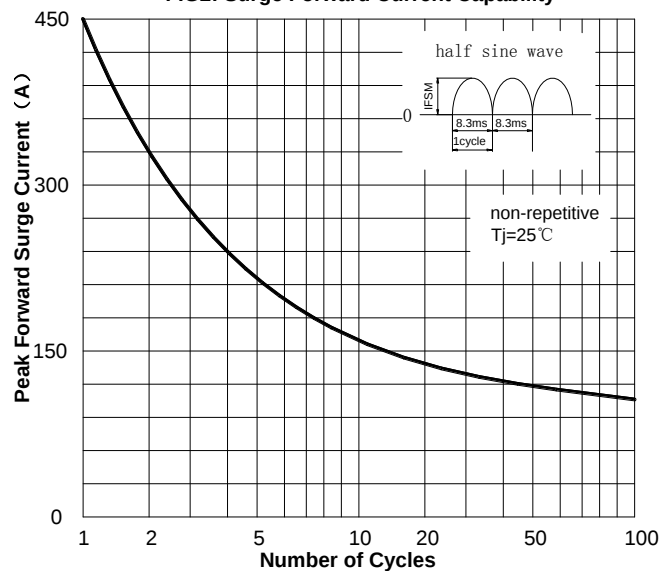


FIG3 : TYPICAL FORWARD CHARACTERISTICS

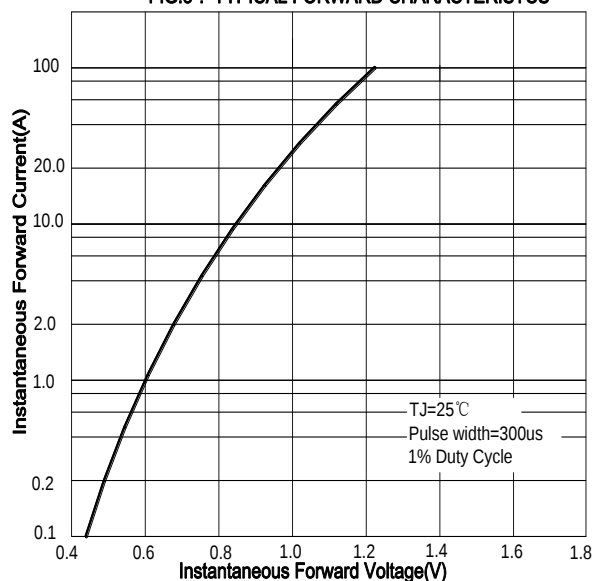
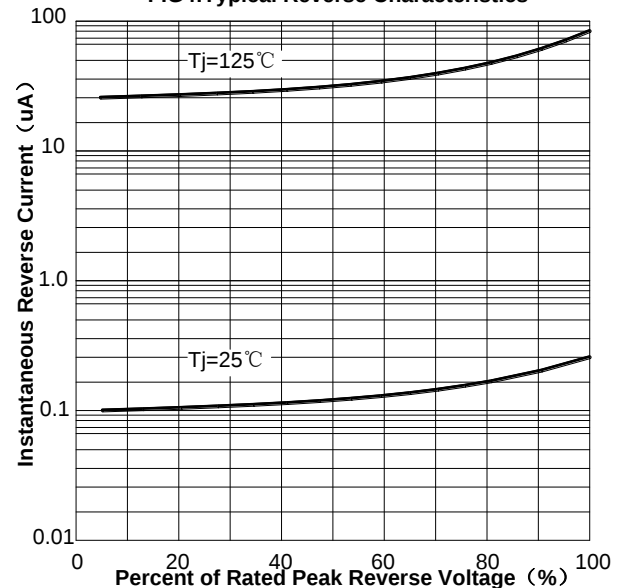
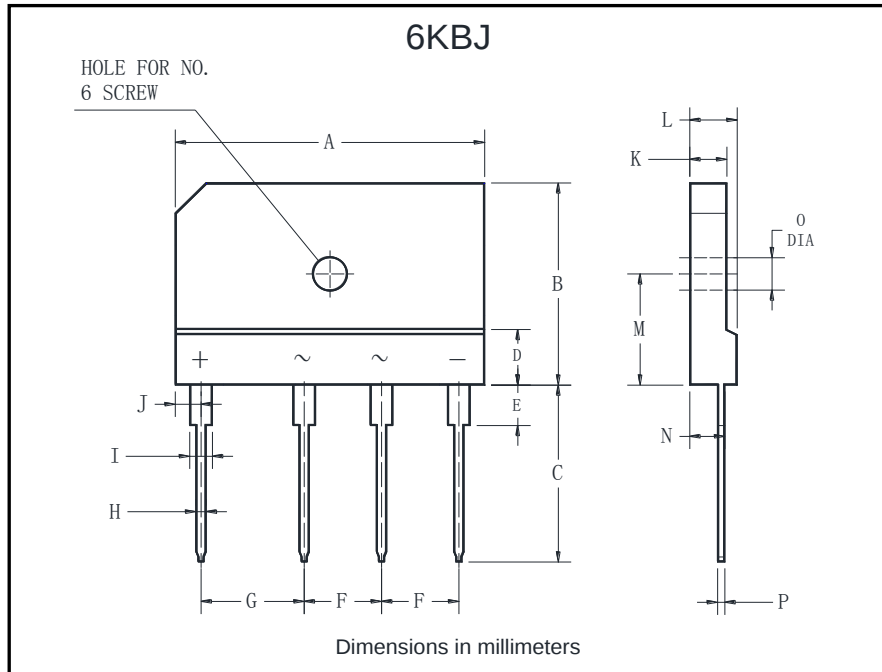


FIG4: Typical Reverse Characteristics





■ 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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