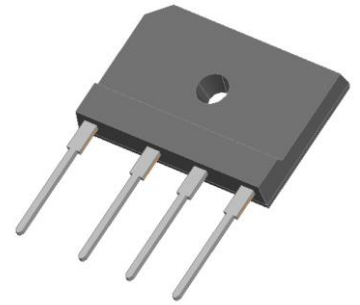


Bridge Rectifiers

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

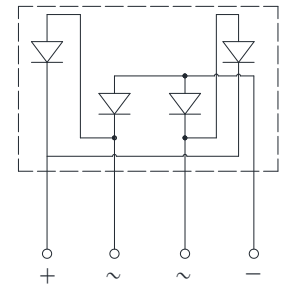


Typical Applications

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

PARAMETER	SYMBOL	UNIT	GBJ25005	GBJ2501	GBJ2502	GBJ2504	GBJ2506	GBJ2508	GBJ2510
Device marking code			GBJ25005	GBJ2501	GBJ2502	GBJ2504	GBJ2506	GBJ2508	GBJ2510
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 $T_c=87^{\circ}\text{C}$	25.0						
		Without heatsink $T_a=25^{\circ}\text{C}$	3.5						
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, $T_j=25^{\circ}\text{C}$	IFSM	A	320						
Current squared time @ $1\text{ms} \leq t \leq 8.3\text{ms}$ $T_j=25^{\circ}\text{C}$, Rating of per diode	I^2t	A^2s	424						
Storage temperature	Tstg	$^{\circ}\text{C}$	-55 ~+150						
Junction temperature	T_j	$^{\circ}\text{C}$	-55 ~+150						
Dielectric strength @ terminals to case, AC 1 minute	Vdis	KV	2						
Mounting torque @ recommend torque: 5kg · cm	Tor	kg · cm	8						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBJ25005	GBJ2501	GBJ2502	GBJ2504	GBJ2506	GBJ2508	GBJ2510
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =12.5A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	V _{RM} =V _{RRM}	5						

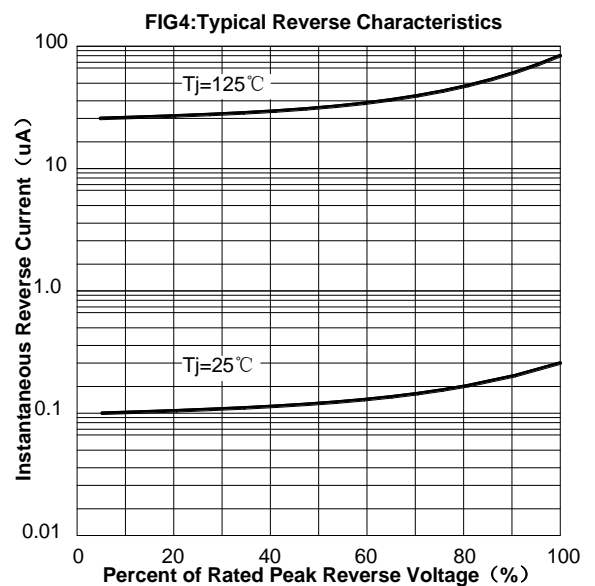
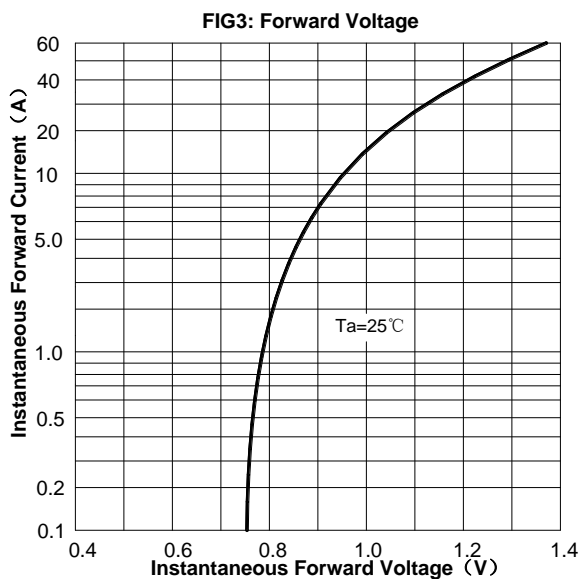
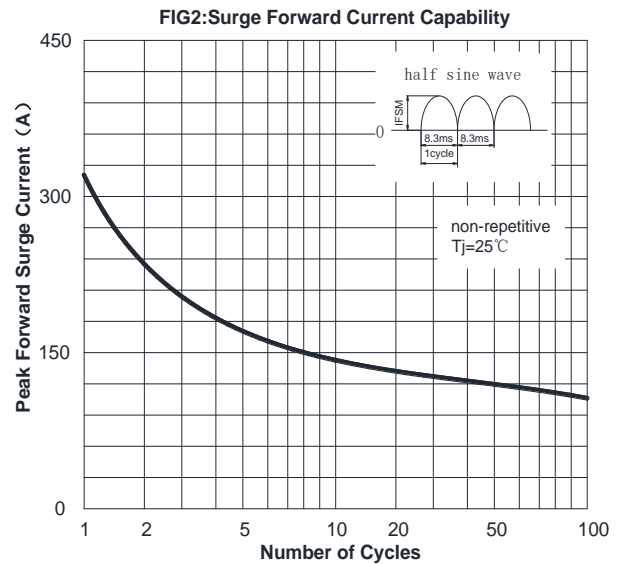
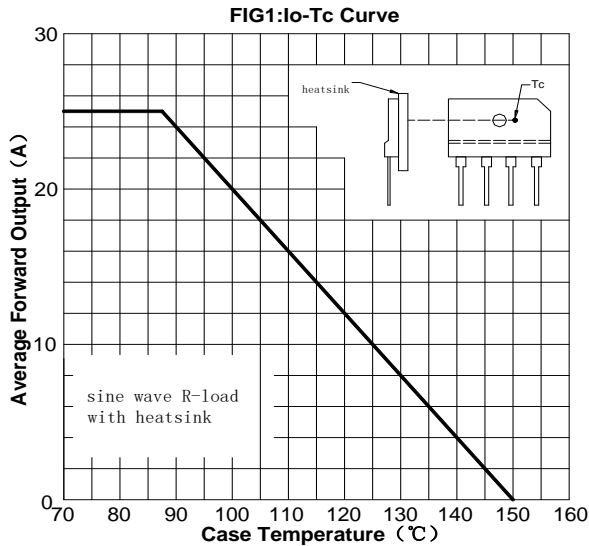
■ **Thermal Characteristics** ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBJ25005	GBJ2501	GBJ2502	GBJ2504	GBJ2506	GBJ2508	GBJ2510
Thermal Resistance	Between junction and ambient, Without heatsink	$R_{\theta J-A}$	$^\circ\text{C/W}$	22.0						
	Between junction and case, With heatsink	$R_{\theta J-C}$		1.0						

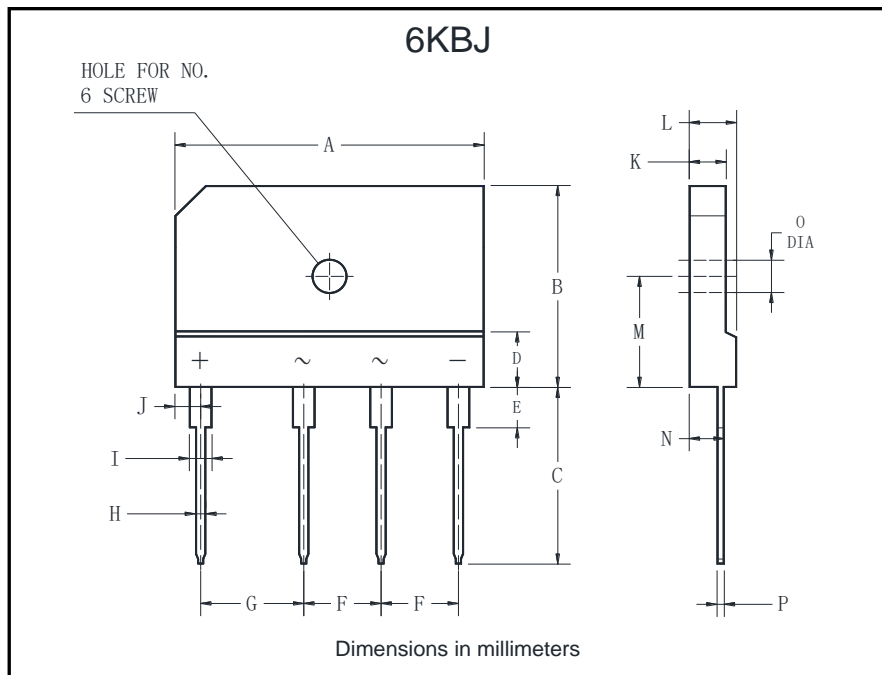
■ **Ordering Information (Example)**

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBJ25005 THRU GBJ2510	B1	Approximate 6.5	15	750	1500	TUBE

■ **Characteristics(Typical)**



■ 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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