

## Bridge Rectifiers

### Features

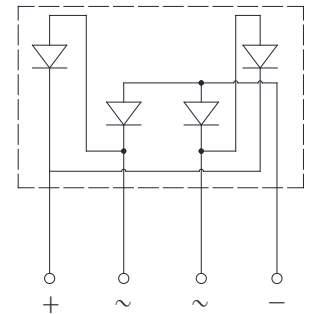
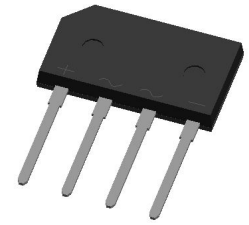
- UL recognition, file #E230084
- Thin single in-line package
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### 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:** 2KBJ  
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	GBL4005A	GBL401A	GBL402A	GBL404A	GBL406A	GBL408A	GBL410A
Device marking code			GBL4005A	GBL401A	GBL402A	GBL404A	GBL406A	GBL408A	GBL410A
Repetitive peak reverse voltage	VRRM	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load, $T_a=25^{\circ}\text{C}$	IO	A	4.0						
Surge(non-repetitive)forward current @60Hz half-sine wave, 1 cycle, $T_j=25^{\circ}\text{C}$	IFSM	A	150						
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 <sup>2</sup> S	93						
Storage temperature	Tstg	°C	-55 ~ +150						
Junction temperature	Tj	°C	-55 ~ +150						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBL4005A	GBL401A	GBL402A	GBL404A	GBL406A	GBL408A	GBL410A
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=2A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM	μA	VRM=VRRM	5						

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

PARAMETER		SYMBOL	UNIT	GBL4005A	GBL401A	GBL402A	GBL404A	GBL406A	GBL408A	GBL410A
Thermal Resistance	Between junction and ambient	R $\theta$ J-A	$^\circ\text{C/W}$	47						
	Between junction and case,	R $\theta$ J-C		10						

■ **Ordering Information (Example)**

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBL4005A-GBL410A	B1	Approximate 2.19	22	1320	5280	Tube
GBL4005A-GBL410A	A1	Approximate 2.19	250	250	6000	Paper Box

■ **Characteristics(Typical)**

FIG1:Io-Ta Curve

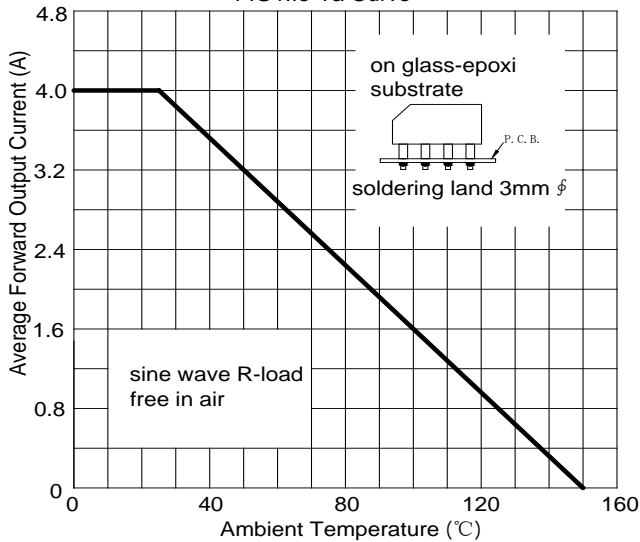


FIG2:Surge Forward Current Capability

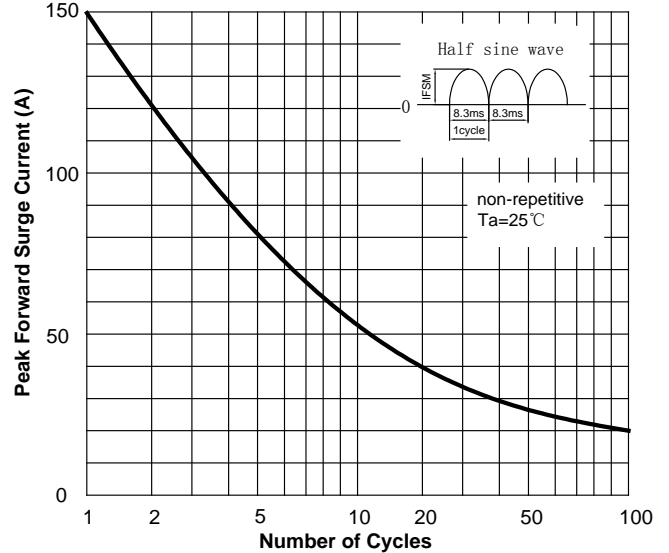


FIG3:Instantaneous Forward Voltage

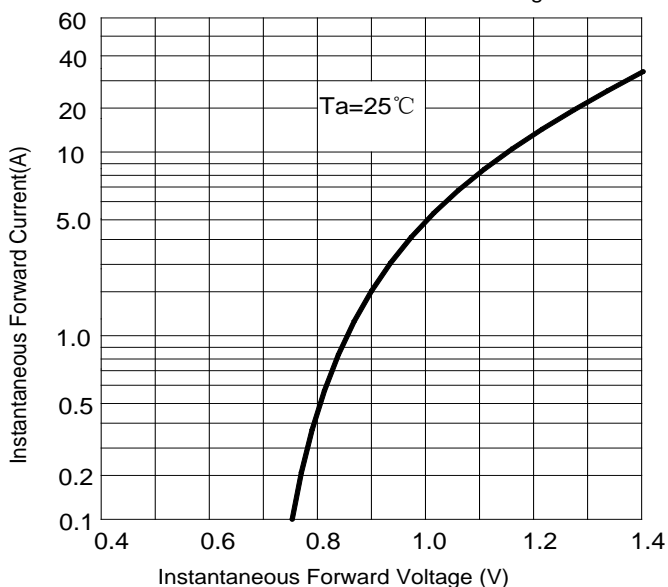
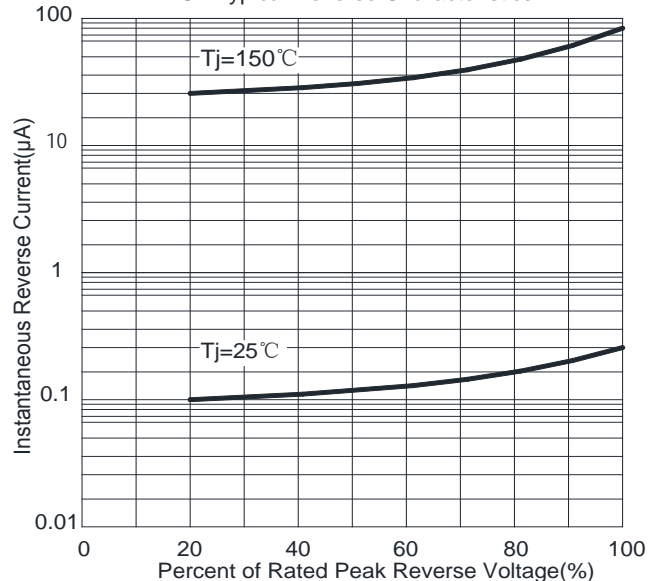
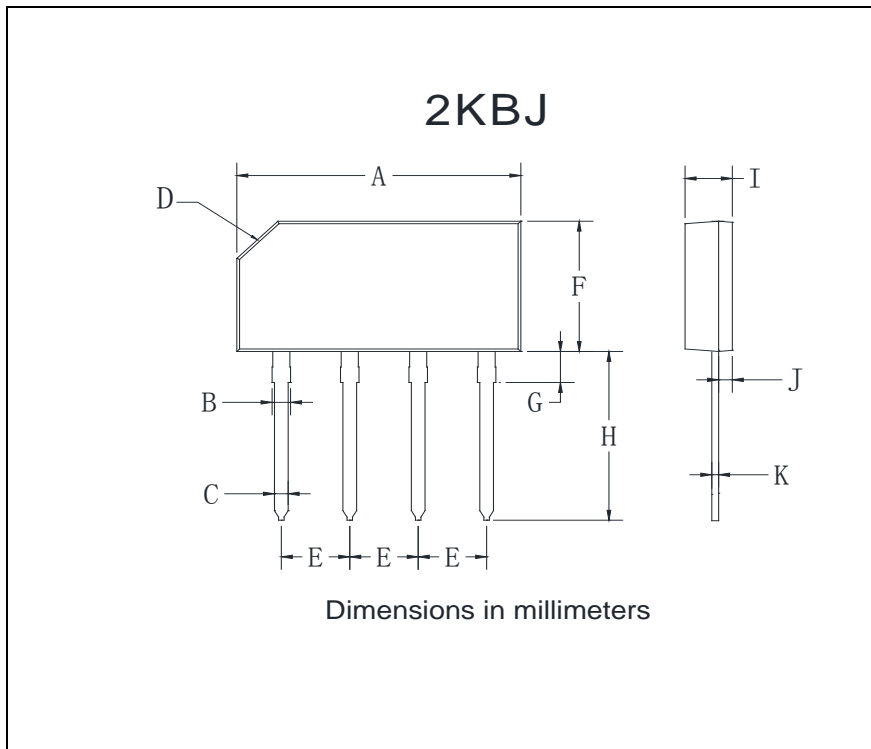


FIG4:Typical Reverse Characteristics



■ **Outline Dimensions**



<b>2KBJ</b>		
Dim	Min	Max
A	19.2	21.2
B	1.2	1.8
C	1.0	1.2
D	Typ: 3.0	
E	4.9	5.1
F	10.5	11.5
G	2.0	3.0
H	13.0	15.0
I	3.0	4.0
J	0.9	1.1
K	0.4	0.6

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