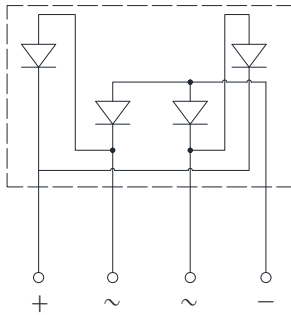
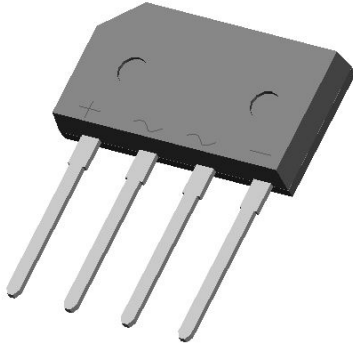


## Bridge Rectifiers



### 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:** GBL  
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<sub>a</sub>=25°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 <sub>a</sub> =25°C	I <sub>O</sub>	A	4.0						
Surge(non-repetitive)forward current @60Hz half-sine wave, 1 cycle, T <sub>j</sub> =25°C	I <sub>FSM</sub>	A	135						
Current squared time @1ms≤t≤8.3ms T <sub>j</sub> =25°C,rating of per diode	i <sup>2</sup> t	A <sup>2</sup> S	75						
Storage temperature	T <sub>stg</sub>	°C	-55 ~+150						
Junction temperature	T <sub>j</sub>	°C	-55 ~+150						

### ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBL4005A	GBL401A	GBL402A	GBL404A	GBL406A	GBL408A	GBL410A
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>F</sub> M=2A	1.05						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	μA	V <sub>RM</sub> =V <sub>RRM</sub>	10						



# GBL4005A THRU GBL410A

## ■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBL4005A	GBL401A	GBL402A	GBL404A	GBL406A	GBL408A	GBL410A
Thermal Resistance	Between junction and ambient	R <sub>θJ-A</sub>	°C/W	47						
	Between junction and case,	R <sub>θJ-C</sub>		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: I<sub>o</sub>-T<sub>a</sub> Curve

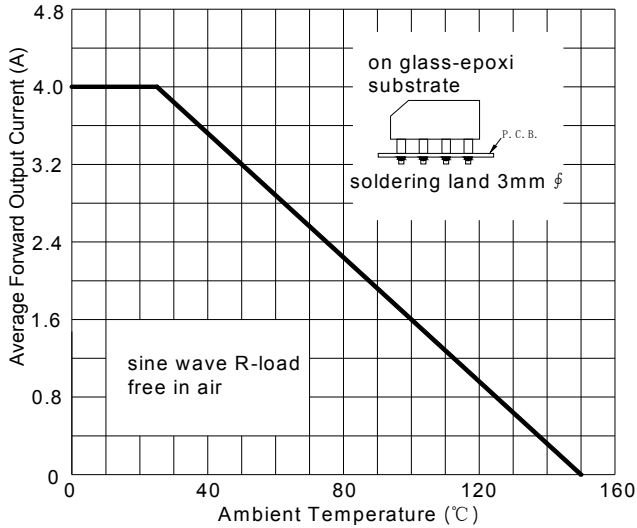


FIG2: Surge Forward Current Capability

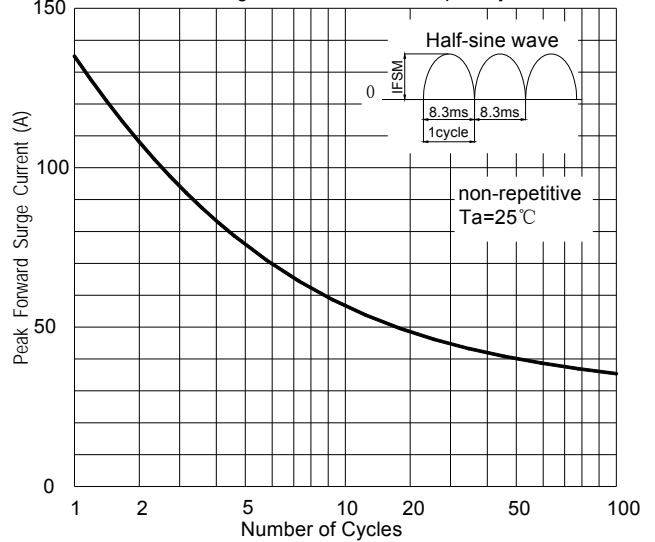


FIG3: Instantaneous Forward Voltage

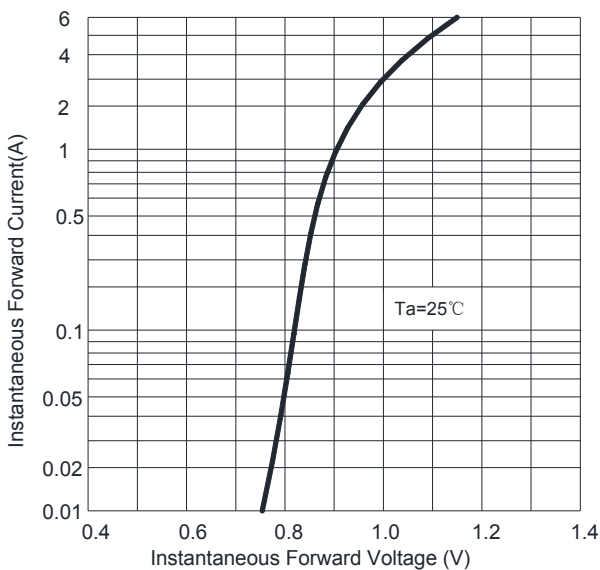
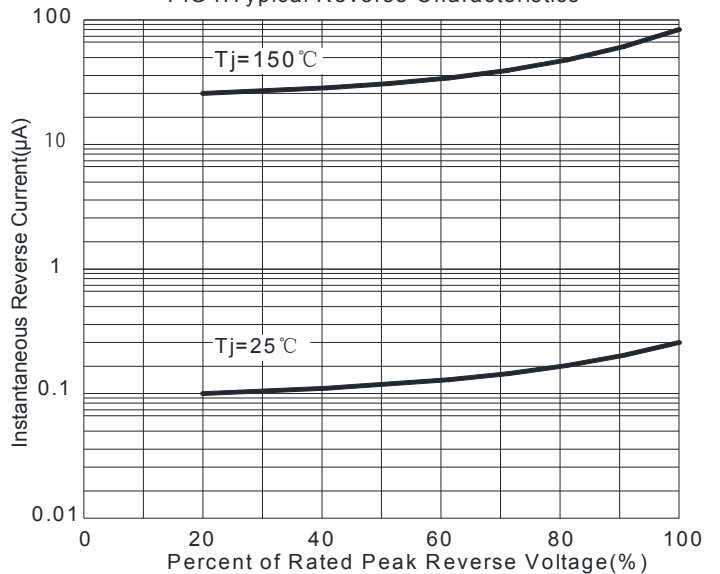


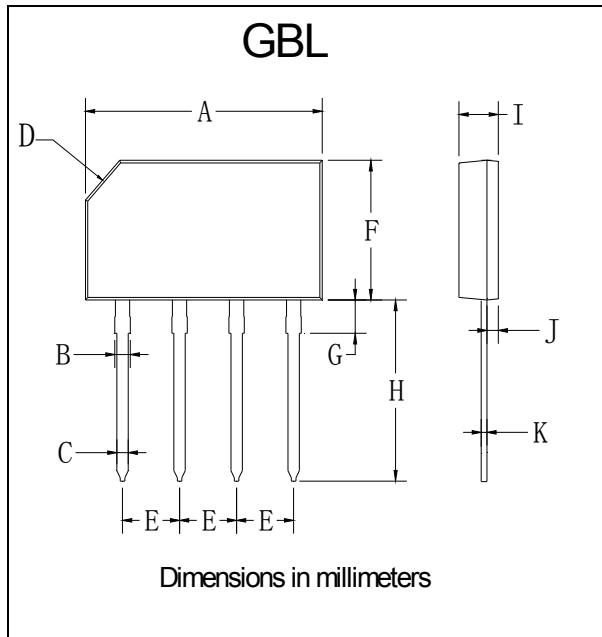
FIG4: Typical Reverse Characteristics





# GBL4005A THRU GBL410A

## ■ Outline Dimensions



GBL		
Dim	Min	Max
A	19.2	21.2
B	1.2	1.8
C	1.0	1.2
D	3.0	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



## GBL4005A THRU GBL410A

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