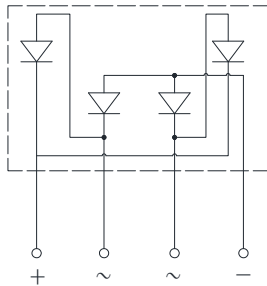
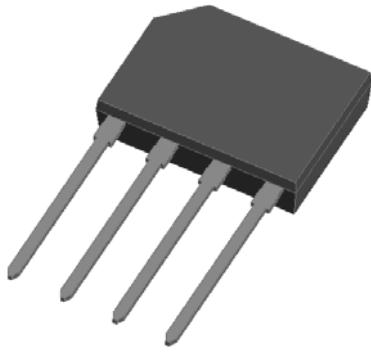


## Bridge Rectifiers



### Features

- UL recognition, file #E230084
- Ideal for printed circuit boards
- 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 monitor, TV, printer, power supply, switching mode power supply, adapter, audio equipment, and home appliances applications.

### Mechanical Data

- **Package:** GBP  
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	GBP4005A	GBP401A	GBP402A	GBP404A	GBP406A	GBP408A	GBP410A
Device marking code			GBP4005A	GBP401A	GBP402A	GBP404A	GBP406A	GBP408A	GBP410A
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 <sub>C</sub> =140°C	I <sub>O</sub>	A	4.0					
	Without heatsink T <sub>C</sub> =70°C								
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T <sub>J</sub> =25°C	IFSM	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	GBP4005A	GBP401A	GBP402A	GBP404A	GBP406A	GBP408A	GBP410A
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =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						

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

PARAMETER	SYMBOL	UNIT	GBP4005A	GBP401A	GBP402A	GBP404A	GBP406A	GBP408A	GBP410A
Thermal Resistance	Between junction and ambient	R <sub>θJ-A</sub>	°C/W	47					
	Between junction and lead	R <sub>θJ-L</sub>		10					



# GBP4005A THRU GBP410A

## Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBP4005A THRU GBP410A	B1	1.37	35	3500	7000	TUBE
GBP4005A THRU GBP410A	A1	1.37	500	500	5000	BOX

## Characteristics (Typical)

FIG1:Io-Tc Curve

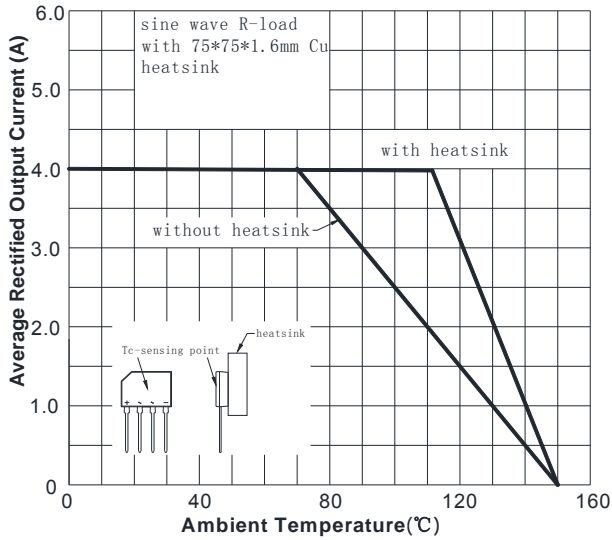


FIG2:Surge Forward Current Capability

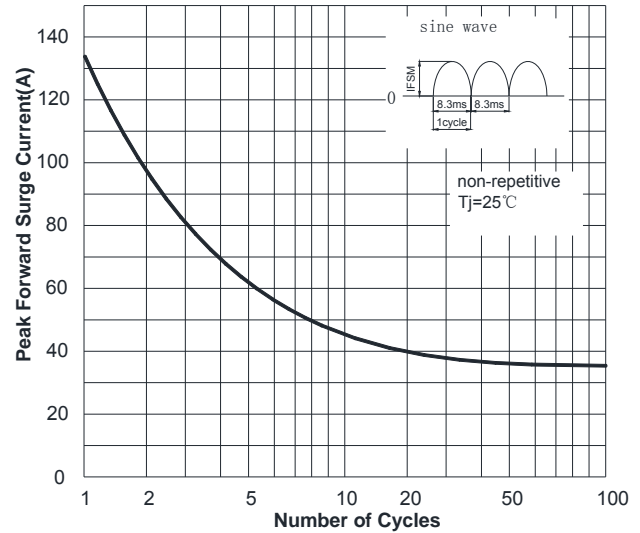


FIG3: Forward Voltage

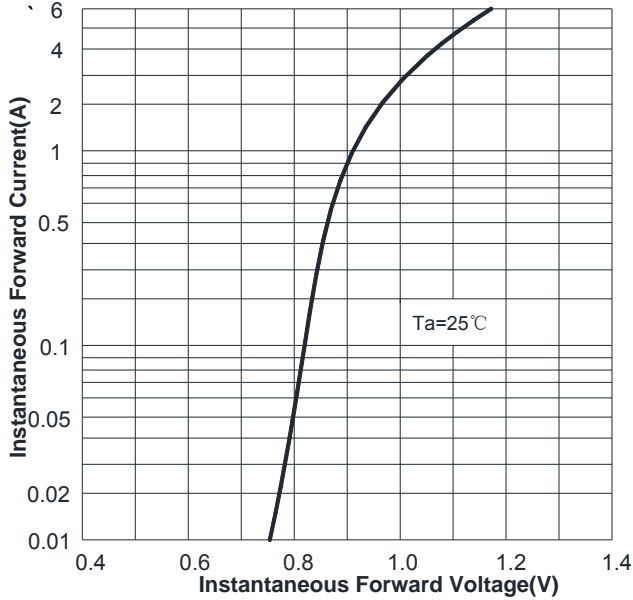
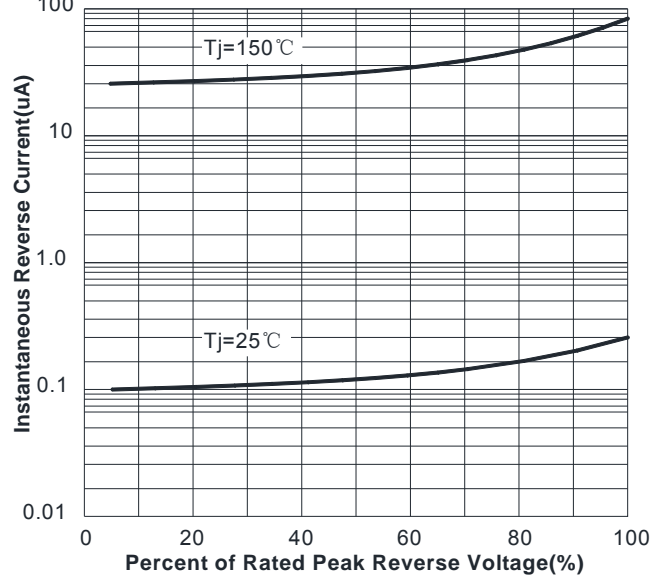


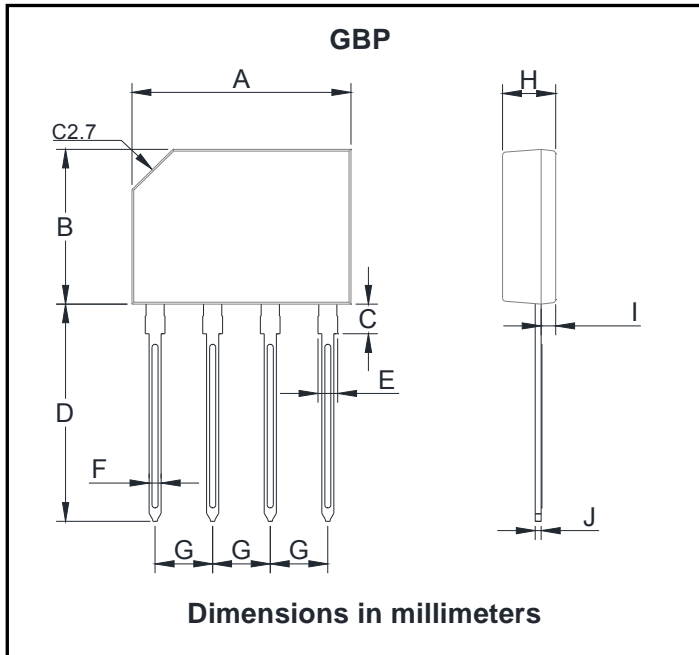
FIG4:Typical Reverse Characteristics





# GBP4005A THRU GBP410A

## ■ Outline Dimensions



GBP		
Dim	Min	Max
A	14.25	14.75
B	10.10	10.60
C	1.80	2.20
D	14.25	14.73
E	1.22	1.42
F	0.76	0.86
G	3.70	3.90
H	3.35	3.65
I	0.80	1.10
J	0.35	0.55



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