

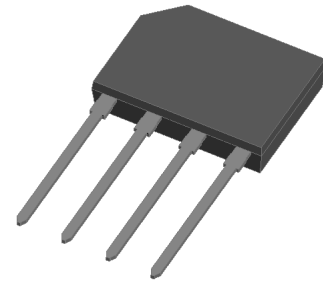
## Bridge Rectifiers

### 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

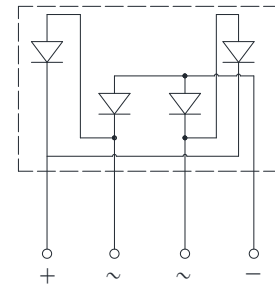
### Typical Applications

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	GBP2005A	GBP201A	GBP202A	GBP204A	GBP206A	GBP208A	GBP210A
Device marking code			GBP2005A	GBP201A	GBP202A	GBP204A	GBP206A	GBP208A	GBP210A
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	2.0					
	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	90						
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	33						
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	GBP2005A	GBP201A	GBP202A	GBP204A	GBP206A	GBP208A	GBP210A
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	IFM=1.0A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	µA	V <sub>RM</sub> =V <sub>RRM</sub>	5						

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

PARAMETER	SYMBOL	UNIT	GBP2005A	GBP201A	GBP202A	GBP204A	GBP206A	GBP208A	GBP210A
Thermal Resistance	Between junction and ambient	R <sub>θJ-A</sub>	°C/W	47.0					
	Between junction and lead	R <sub>θJ-L</sub>		10.0					

■ **Ordering Information (Example)**

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBP2005A THRU GBP210A	B1	1.4	35	2100	4200	TUBE

■ **Characteristics (Typical)**

FIG1:  $I_o$ - $T_c$  Curve

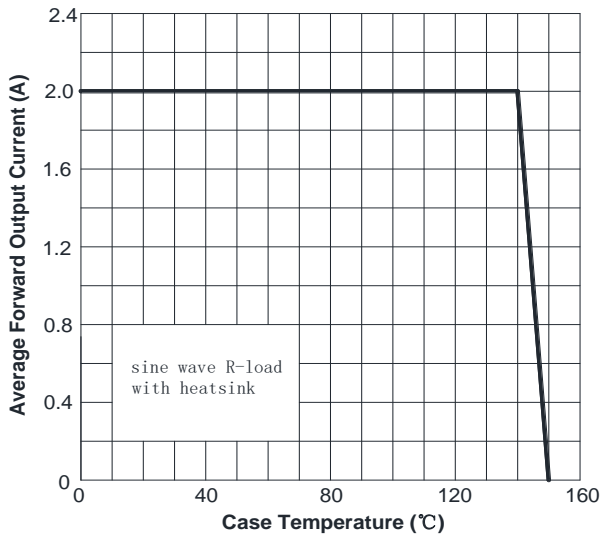


FIG2: Surge Forward Current Capability

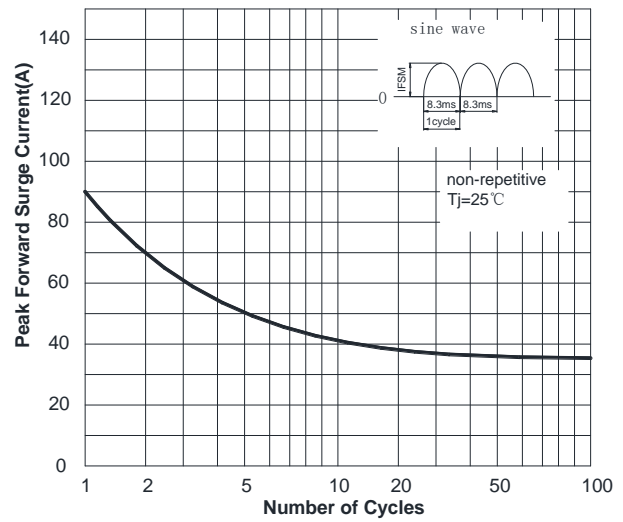


FIG3: Forward Voltage

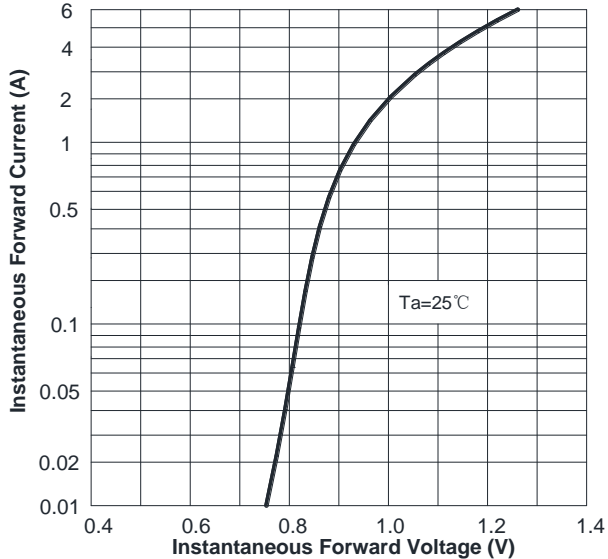
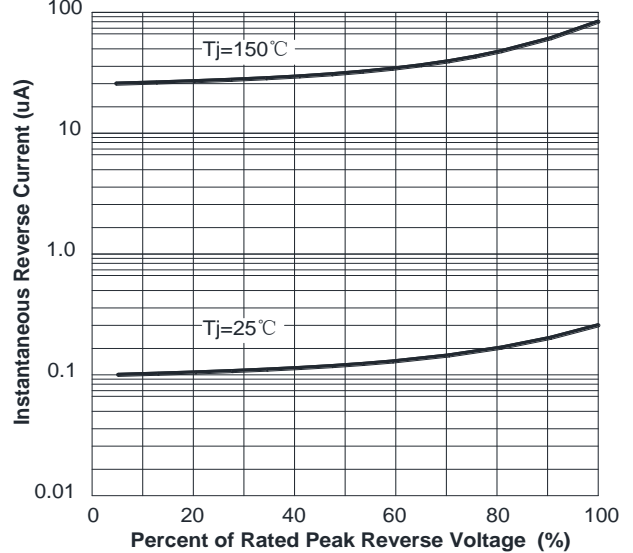
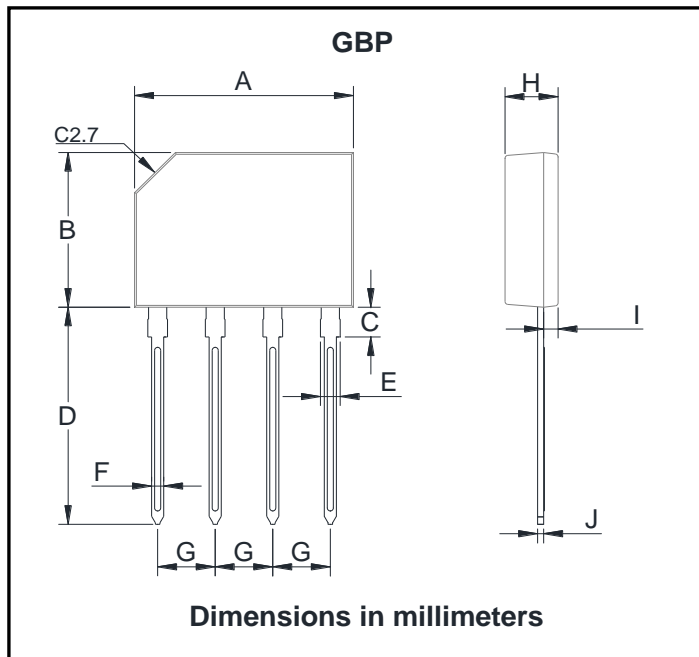


FIG4: Typical Reverse Characteristics



■ 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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