

Bridge Rectifiers

Features

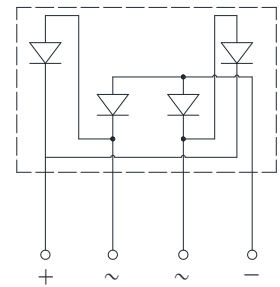
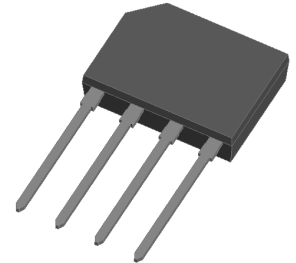
- UL recognition, file #E230084
- Ideal for printed circuit boards
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

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_a=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 _c =140°C	I _O	A	4.0					
	Without heatsink T _c =70°C								
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T _j =25°C	IFSM	A	135						
Current squared time @ 1ms≤t≤8.3ms T _j =25°C, Rating of per diode	I ² t	A ² s	75						
Storage temperature	T _{stg}	°C	-55 ~+150						
Junction temperature	T _j	°C	-55 ~+150						

■Electrical Characteristics (T_a=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 _F	V	IFM=2.0A	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°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GBP4005A	GBP401A	GBP402A	GBP404A	GBP406A	GBP408A	GBP410A
Thermal Resistance	Between junction and ambient	R _{θJ-A}	°C/W	47.0					
	Between junction and lead	R _{θJ-L}		10.0					

■ Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBP4005A THRU GBP410A	B1	1.4	35	2100	4200	TUBE

■ Characteristics (Typical)

FIG1:Io-Tc Curve

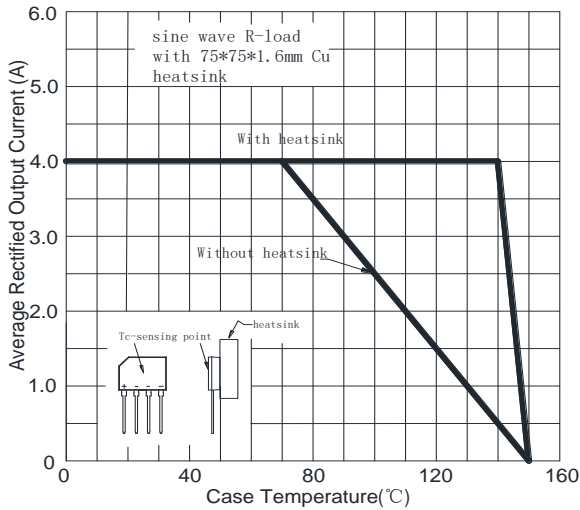


FIG2:Surge Forward Current Capability

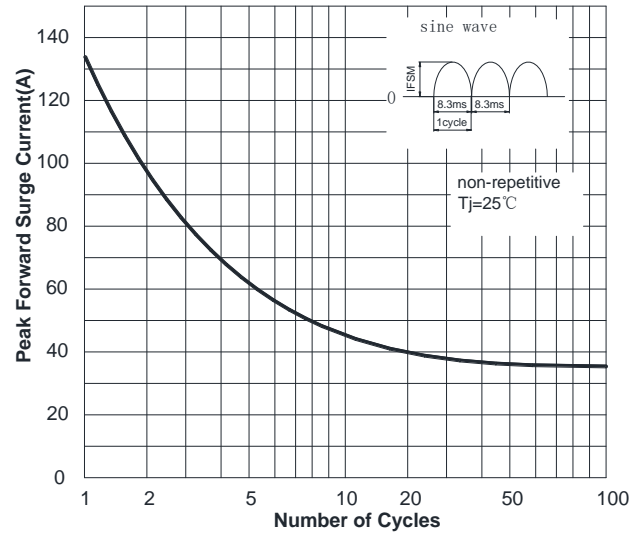


FIG3: Forward Voltage

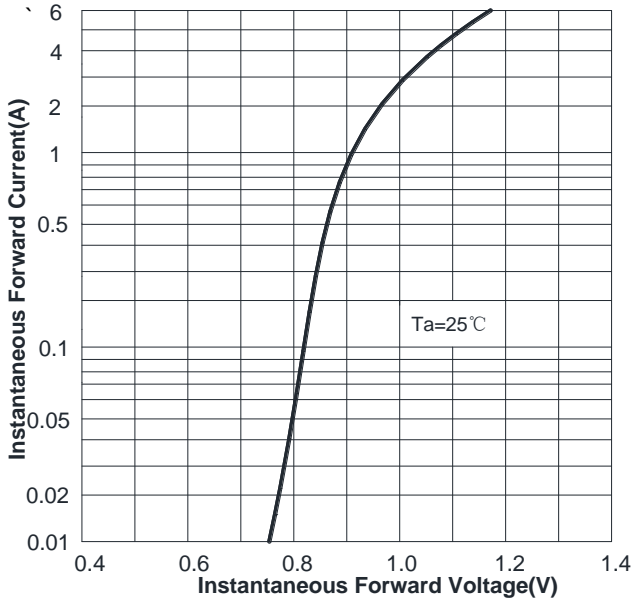
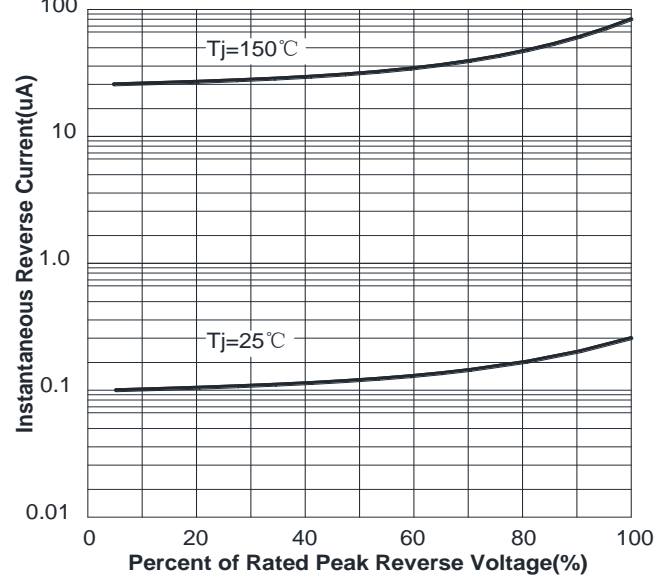
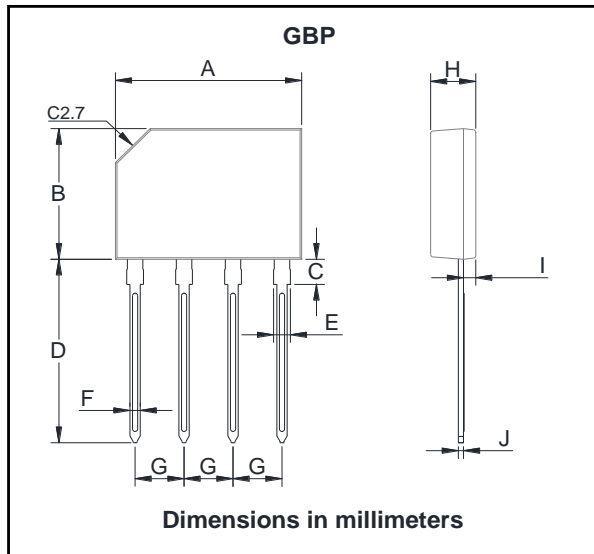


FIG4:Typical Reverse Characteristics



■ 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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