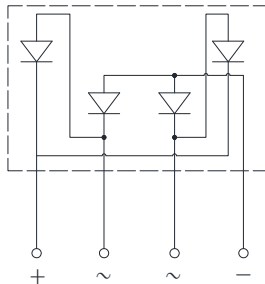
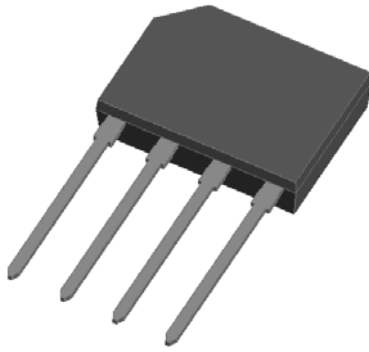


Bridge Rectifiers



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	GBP3005	GBP301	GBP302	GBP304	GBP306	GBP308	GBP310
Device marking code			GBP3005	GBP301	GBP302	GBP304	GBP306	GBP308	GBP310
Repetitive peak reverse voltage	VRRM	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load	I _O	With heatsink T _C =140°C	3.0						
		Without heatsink T _C =70°C							
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T _J =25°C	IFSM	A	90						
Current squared time @1ms≤t≤8.3ms T _J =25°C, Rating of per diode	I ² t	A ² s	33						
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	GBP3005	GBP301	GBP302	GBP304	GBP306	GBP308	GBP310
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =1.5A	1.05						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	V _{RM} =V _{RRM}	10						

■Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GBP3005	GBP301	GBP302	GBP304	GBP306	GBP308	GBP310
Thermal Resistance	Between junction and ambient	R _{θJ-A}	47						
	Between junction and lead	R _{θJ-L}							



GBP3005 THRU GBP310

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBP3005-GBP310	B1	1.37	35	3500	7000	TUBE
GBP3005-GBP310	A1	1.37	500	500	5000	BOX

■ Characteristics (Typical)

FIG1:I_o-T_c Curve

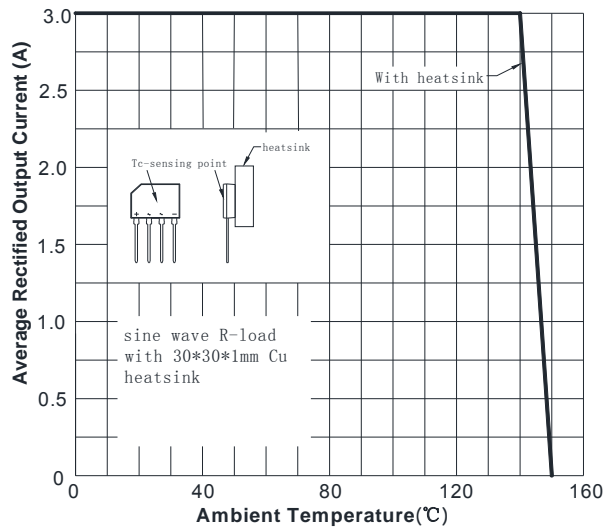


FIG2: Surge Forward Current Capability

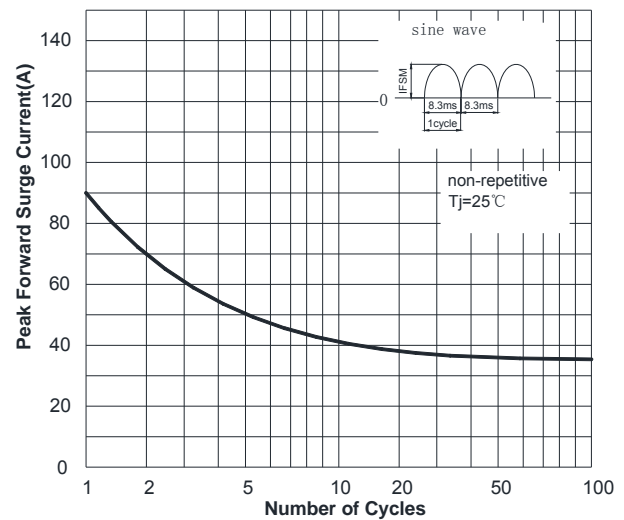


FIG3: Forward Voltage

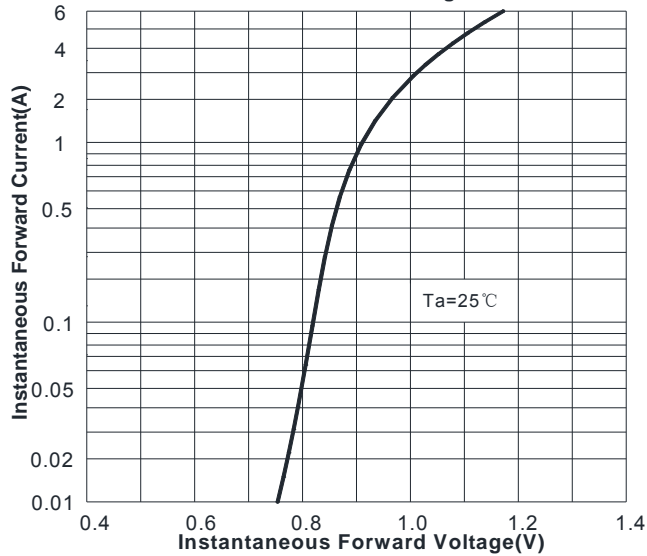
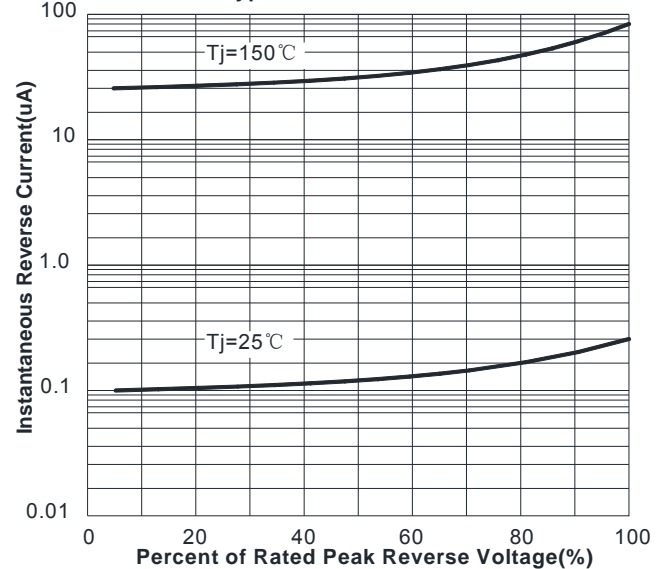
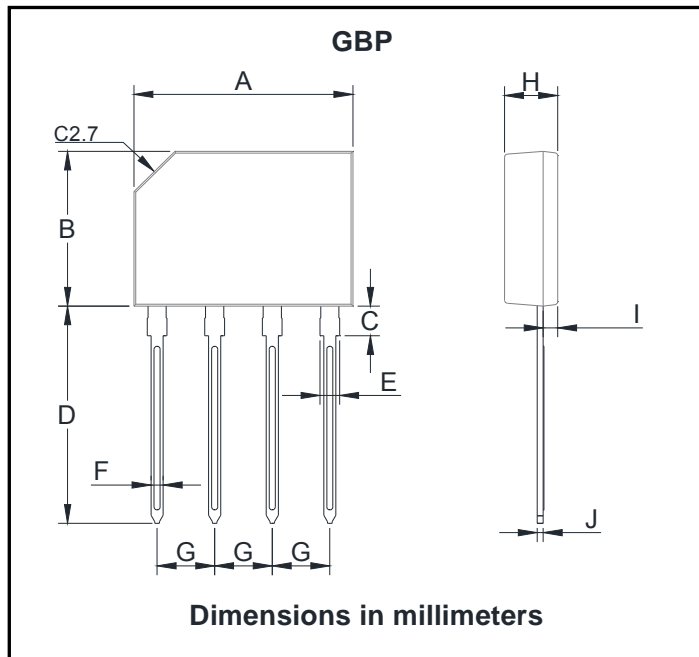


FIG4: Typical Reverse Characteristics





■ 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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