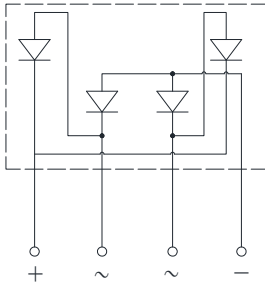
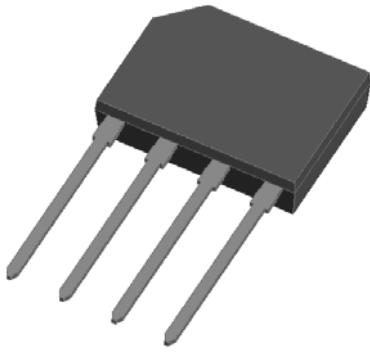


Bridge Rectifiers



Features

- UL recognition, file #E230084
- Glass passivated chip junction
- 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 ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GBP3005S	GBP301S	GBP302S	GBP304S	GBP306S	GBP308S	GBP310S
Device marking code			GBP3005S	GBP301S	GBP302S	GBP304S	GBP306S	GBP308S	GBP310S
Maximum Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	VRMS	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	VDC	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, $T_c=120^\circ\text{C}$	I_O	A	3.0						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, $T_j=25^\circ\text{C}$	IFSM	A	70						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j=25^\circ\text{C}$			140						
Current squared time @1ms≤t<8.3ms $T_j=25^\circ\text{C}$, Rating of per diode	I^2t	A ² s	20.3						
Dielectric strength @ terminals to case, AC 1 minute	Vdis	KV	2						
Storage temperature	T_{stg}	°C	-55 ~ +150						
Junction temperature	T_j	°C	-55 ~ +150						



GBP3005S THRU GBP310S

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBP3005S	GBP301S	GBP302S	GBP304S	GBP306S	GBP308S	GBP310S	
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =1.5A								1.0
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25°C								5
			T _j =125°C								100
Typical junction capacitance	C _j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C								22

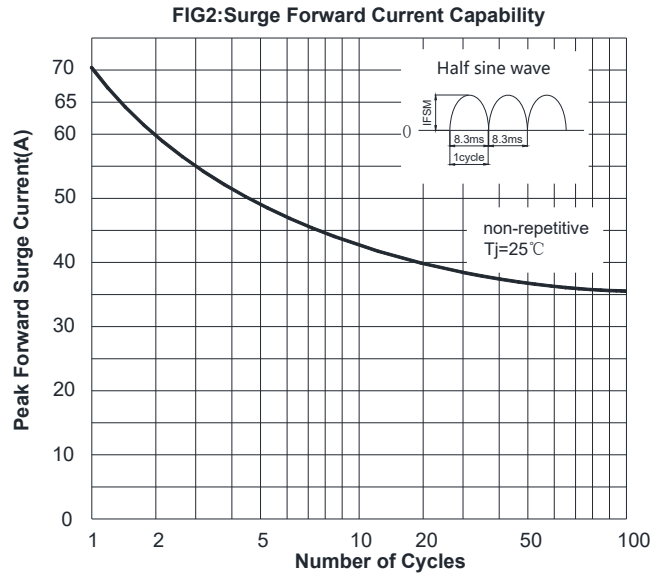
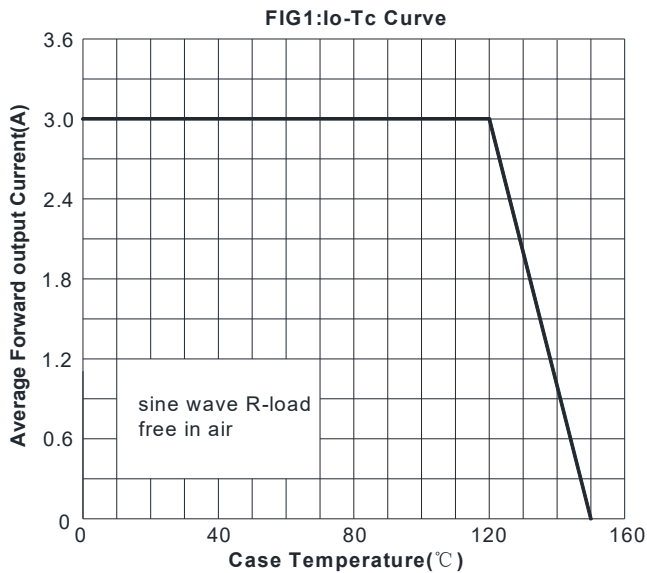
■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBP3005S	GBP301S	GBP302S	GBP304S	GBP306S	GBP308S	GBP310S	
Thermal Resistance	Between junction and ambient	R _{θJ-A}	°C/W								45
	Between junction and lead	R _{θJ-c}									5

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBP3005S - GBP310S	B1	Approximate 1.4	35	2100	4200	TUBE

■ Characteristics (Typical)





GBP3005S THRU GBP310S

FIG3: Typical Forward Voltage

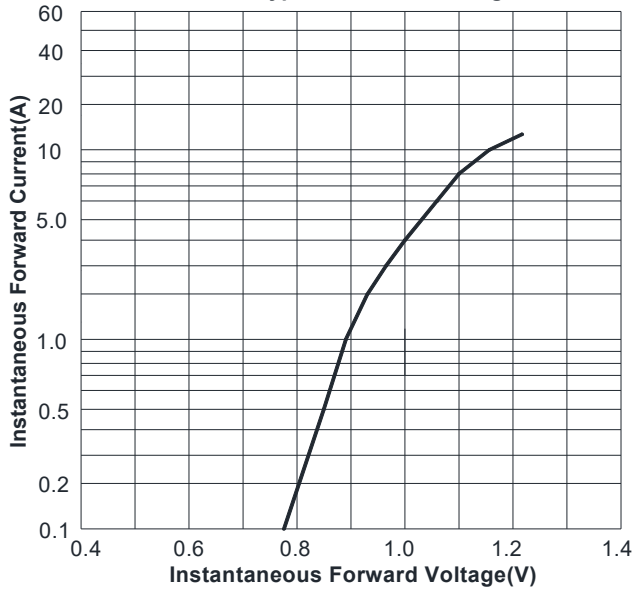
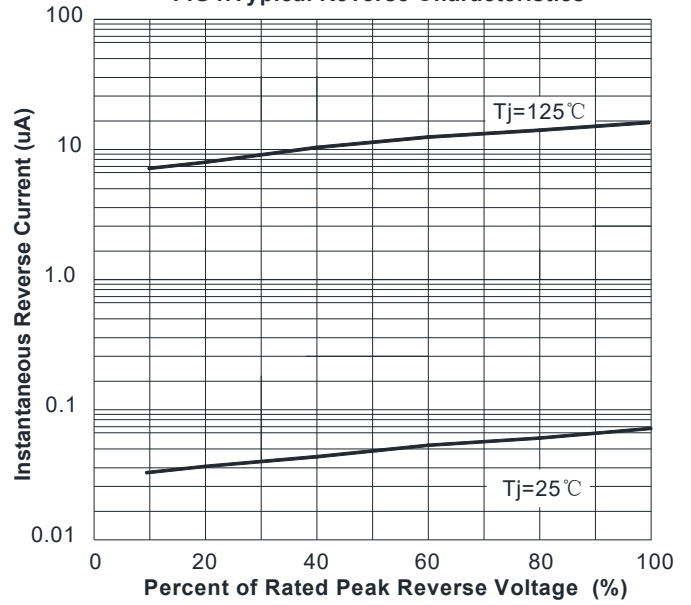
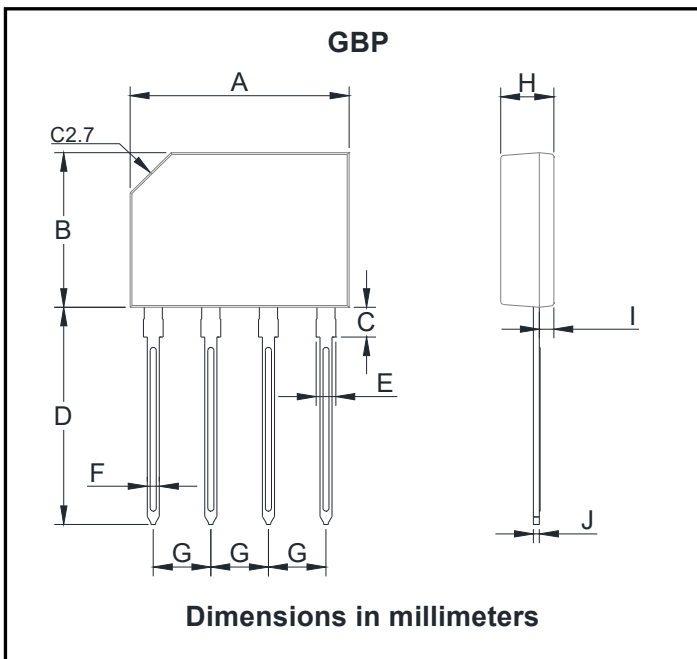


FIG4: Typical Reverse Characteristics



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



GBP3005S THRU GBP310S

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