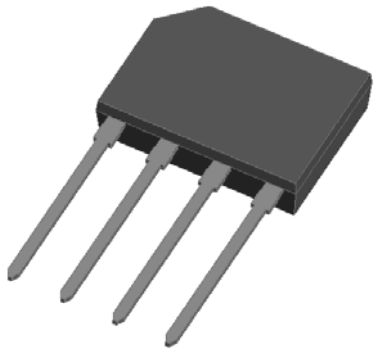
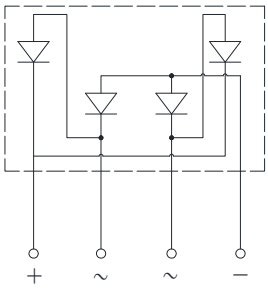
Bridge Rectifiers





Features

- 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℃ 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	V_{RRM}	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	V_{DC}	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, Tc=120℃	I_O	A	3.0						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25℃	I_{FSM}	A	70						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃			140						
Current squared time @1ms≤t<8.3ms Tj=25℃，Rating of per diode	I^2t	A^2s	20.3						
Dielectric strength @ terminals to case, AC 1 minute	Vdis	KV	2						
Storage temperature	T_{stg}	℃	-55 ~ +150						
Junction temperature	T_j	℃	-55 ~ +150						

■Electrical Characteristics（T_a=25℃ 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℃	5						
			T_j =125℃	100						
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	22						

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	GBP3005S	GBP301S	GBP302S	GBP304S	GBP306S	GBP308S	GBP310S
Thermal Resistance	Between junction and ambient	$R_{\theta J-A}$	℃/W	45						
	Between junction and lead	$R_{\theta J-c}$		5						

■Ordering Information (Example)

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

■ Characteristics (Typical)

FIG1:Io-Tc Curve

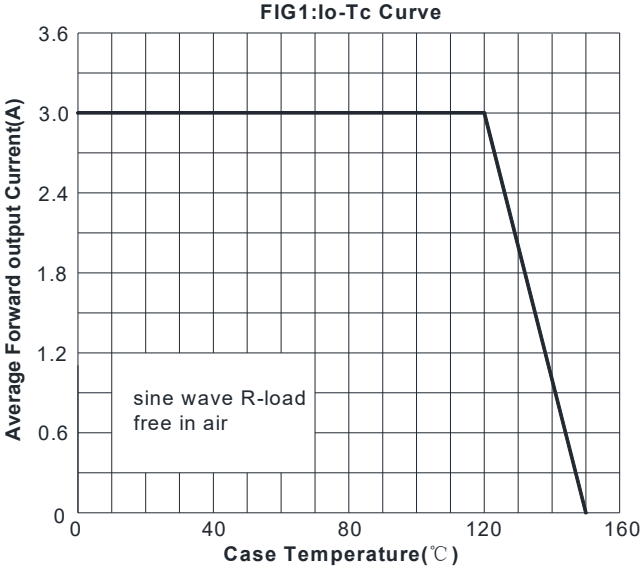


FIG2:Surge Forward Current Capability

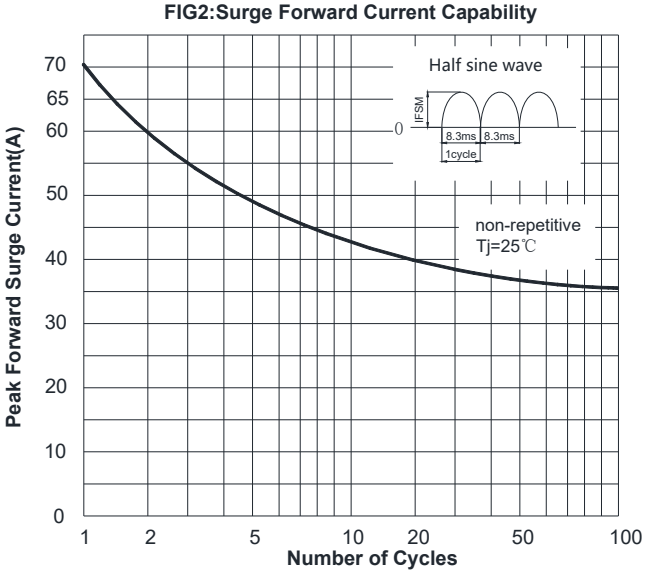


FIG3: Typical Forward Voltage

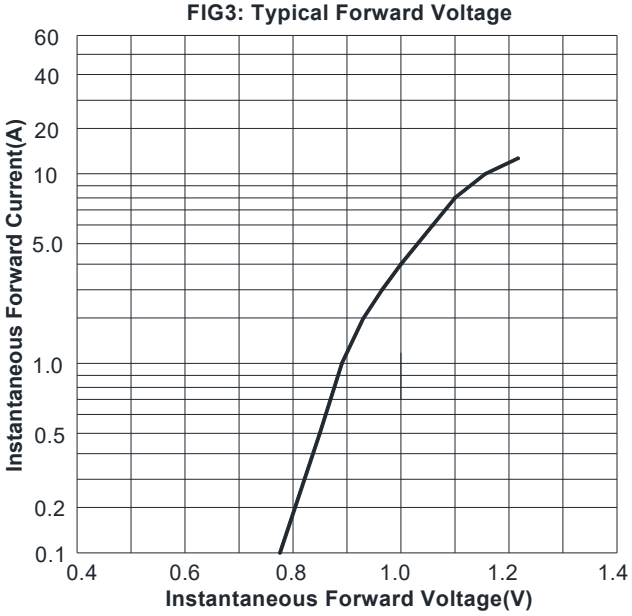
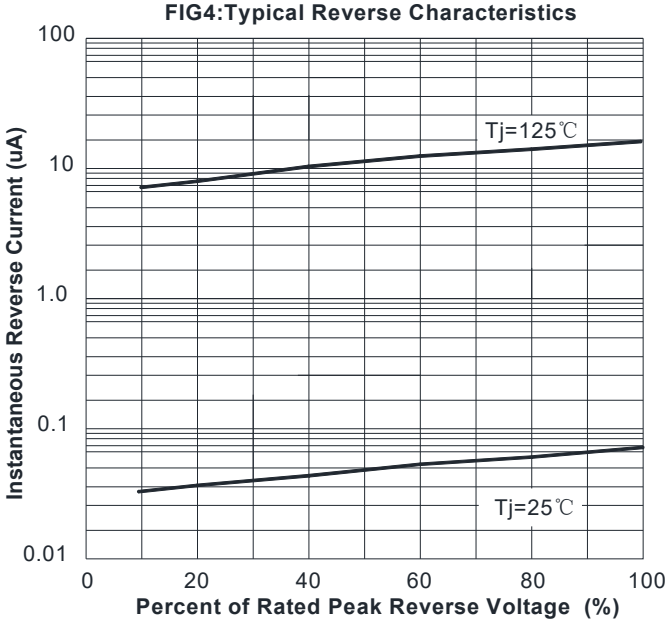
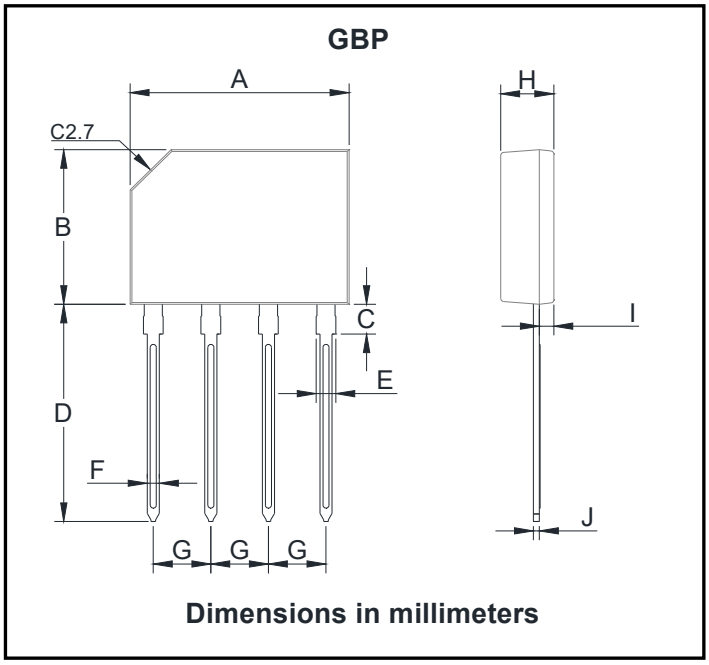


FIG4:Typical Reverse Characteristics



■ 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

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