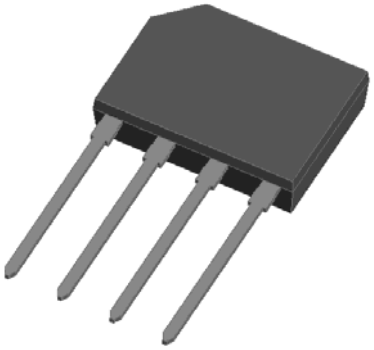
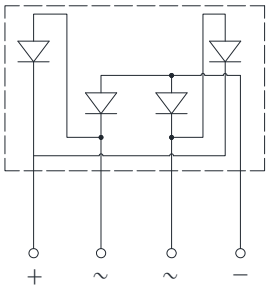
Bridge Rectifiers





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℃ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBP3005A	GBP301A	GBP302A	GBP304A	GBP306A	GBP308A	GBP310A
Device marking code				GBP3005A	GBP301A	GBP302A	GBP304A	GBP306A	GBP308A	GBP310A
Repetitive peak reverse voltage		V_{RRM}	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load	With heatsink T_C =140℃	I_O	A	3.0						
	Without heatsink T_C =70℃									
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, Tj=25℃		I_{FSM}	A	100						
Current squared time @1ms≤t≤8.3ms Tj=25℃， Rating of per diode		I^2t	A^2s	41						
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	GBP3005A	GBP301A	GBP302A	GBP304A	GBP306A	GBP308A	GBP310A
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℃ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBP3005A	GBP301A	GBP302A	GBP304A	GBP306A	GBP308A	GBP310A
Thermal Resistance	Between junction and ambient	$R_{\theta J-A}$	℃/W	47						
	Between junction and lead	$R_{\theta J-L}$		10						

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBP3005A THRU GBP310A	B1	1.37	35	3500	7000	TUBE
GBP3005A THRU GBP310A	A1	1.37	500	500	5000	BOX

■ Characteristics (Typical)

FIG1:Io-Tc Curve

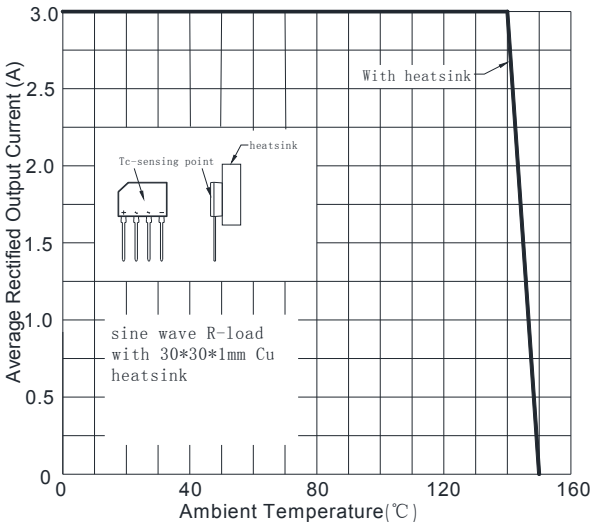


FIG2:Surge Forward Current Capability

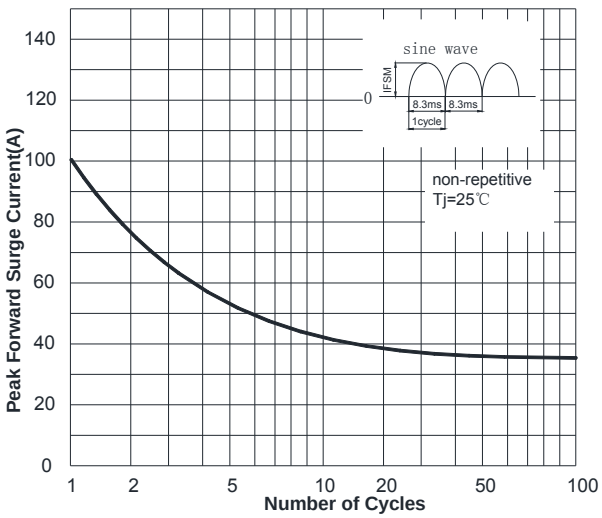


FIG3: Forward Voltage

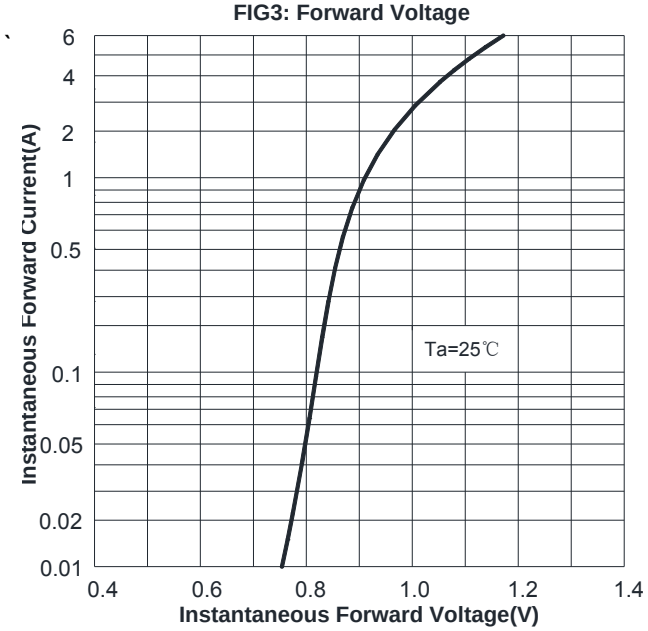
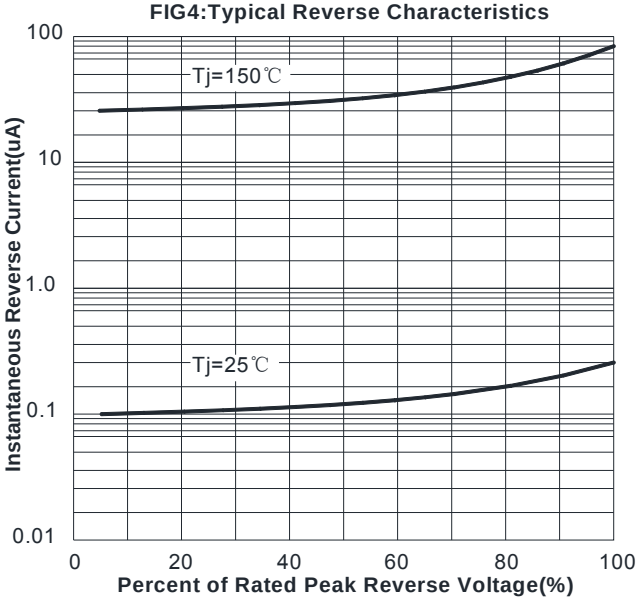
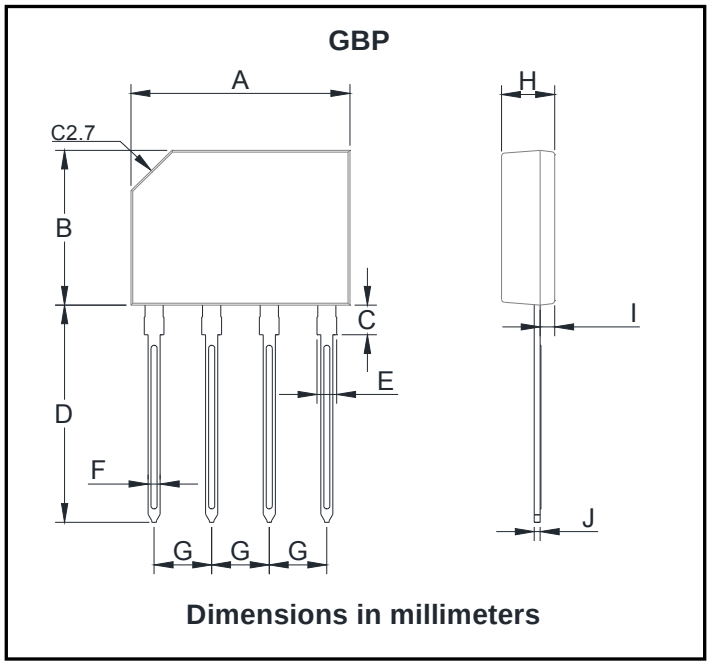


FIG4:Typical Reverse Characteristics



■ 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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