

3A, 600V ~ 1000V Glass Passivated Bridge Rectifier

Features

- Glass passivated chip
- Low Reverse Leakage Current
- High surge current capability to 80 Amperes
- UL Recognized File # E249161
- Compliant to RoHS directive 2011/65/EU

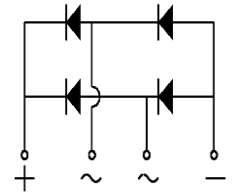
Applications

- Household Electric Appliances
- General purpose single phase bridge rectifier
- Switching mode power supply
- Industrial power supply

Mechanical Data

- Case : Molded plastic case
- Polarity : Polarity symbols being marked on body
- Weight : About 1.3 grams

KEY PARAMETERS		
PARAMETER	VALUE	UNIT
IF(AV)	3	A
VRRM	600~1000	V
IFSM	80	A
Package	GBP	



Absolute Maximum Ratings@ Ta = 25°C unless otherwise noted

PARAMETER	Symbol	GBP306	GBP308	GBP310	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	800	1000	V
Reverse non-repetitive Peak Reverse Voltage	V_{RSM}	700	900	1100	V
Average Rectified Output Current with PCB board, TC=75°C	$I_{(AV)}$	3			A
Surge peak forward current, 10 ms single half sine-wave superimposed on rated loadper diode	I_{FSM}	80			A
Rating for fusing 1ms<t<10.0ms,Tj=25°C , Rating of per diode	I^2t	32			A ² s
Junction Temperature	T_J	-55 ~ +150			°C
Storage Temperature	T_{STG}	-55 ~ +150			°C

Electrical Characteristics @ Ta = 25°C unless otherwise noted

PARAMETER	CONDITIONS	SYMBOL	TYP	MAX	Unit
Forward voltage per diode	IF=1.5A, Tj=25°C	VF	-	1.1	V
	IF=1.5A, Tj=125°C		-	1.0	V
Reverse current @ rated VR per diode	Tj=25°C	IR	-	5	μA
	Tj=125°C		-	100	μA

Thermal Performance

PARAMETER	Symbol	TYP	Unit
Junction-to-lead thermal resistance	$R_{\theta JL}$	12	°C/W
Junction-to-ambient thermal resistance	$R_{\theta JA}$	59	°C/W
Junction-to-case thermal resistance	$R_{\theta JC}$	13	°C/W

Ratings and Characteristics Curves

FIG1: $I_o - T_c$ Curve

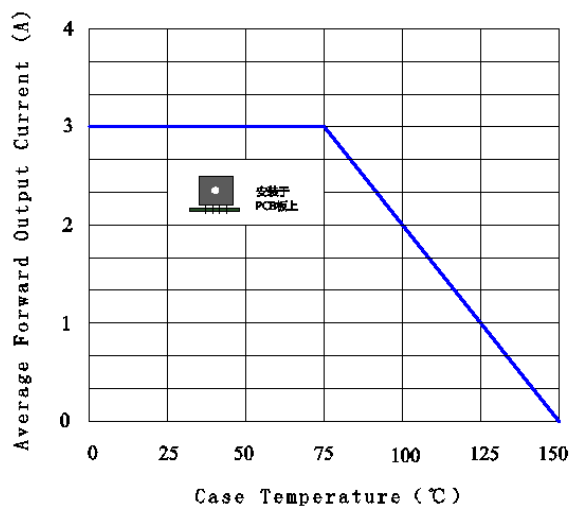


FIG2: Surge Forward Current Capability

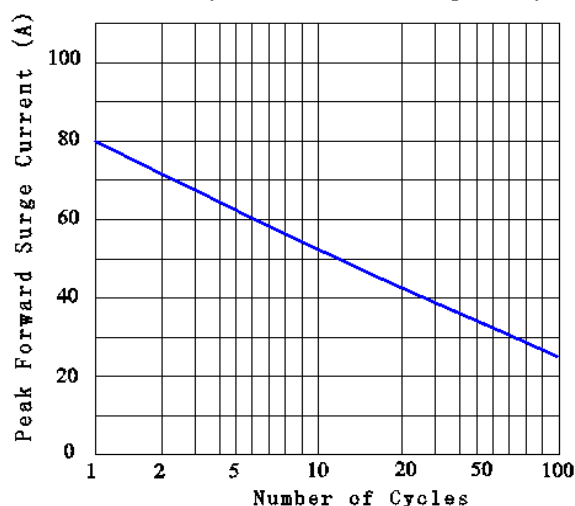


FIG3: Forward Voltage

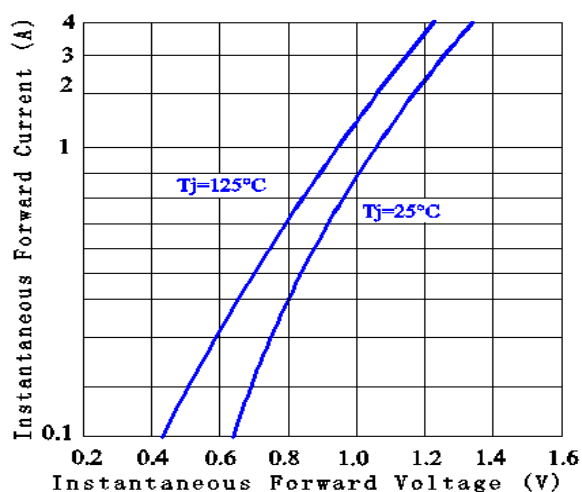
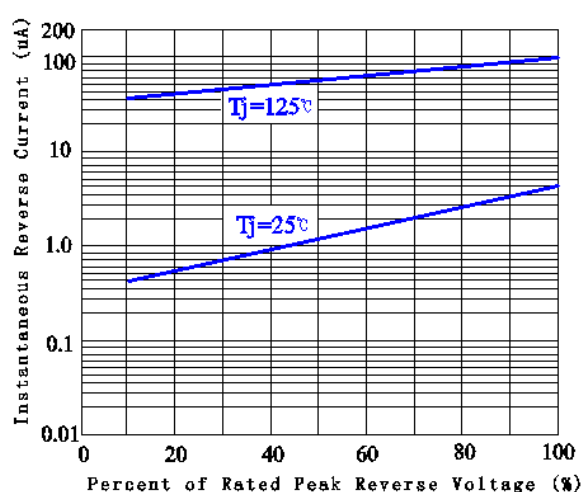


FIG4: Instantaneous Reverse Characteristics



MARKING DIAGRAM

 : 公司 LOGO

GBP310: GBP 封装形式

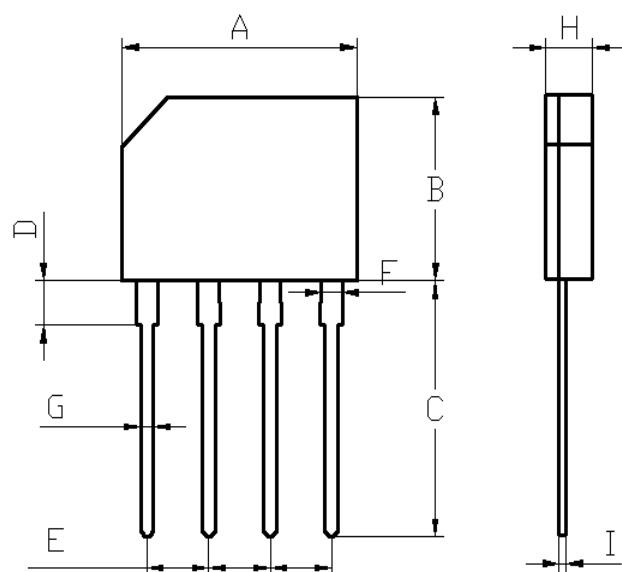
3: 电流 3A

10 : 电压 1000V (10*100 倍)

HE2101: 产品批次码



PACKAGE OUTLINE DIMENSIONS



Dim	min	max
A	13.90	15.00
B	9.90	10.90
C	13.80	15.10
D	1.70	2.30
E	3.60	4.00
F	1.10	1.70
G	0.66	0.96
H	2.65	3.65
I	0.30	0.60
Dimensions in millimeters		

Notice

Unless otherwise specified in the datasheet, the product is designed and qualified as a standard commercial product and is not intended for use in applications that require extraordinary levels of quality and reliability, such as automotive, aviation/aerospace and life-support devices or systems. Any and all semiconductor products have certain probability to fail or malfunction, which may result in personal injury, death or property damage. Customer are solely responsible for providing adequate safe measures when design their systems. Share reserves the right to improve product design, function and reliability without notice.