



GBP2005G THTU GBP210G

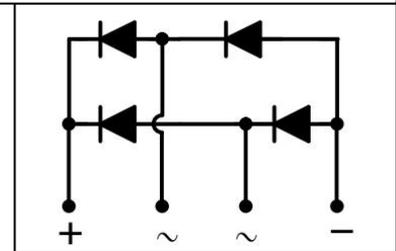
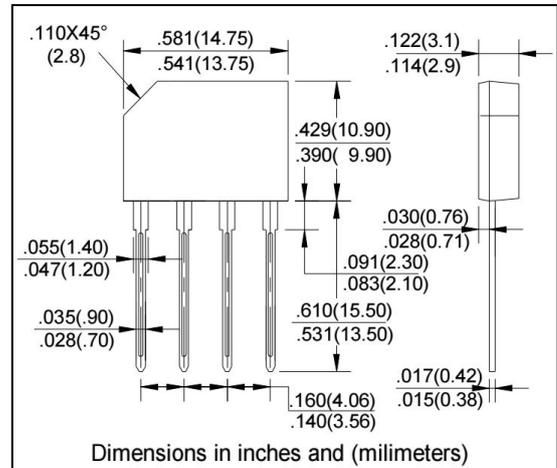
2.0A Single-Phase Silicon Bridge Rectifier

● Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

● Mechanical Data

- Package: GBP, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Symbol	Parameter	GBP 2005G	GBP 201G	GBP 202G	GBP 204G	GBP 206G	GBP 208G	GBP 210G	Unit
V_{RRM}	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
V_{RMS}	Maximum RMS Reverse Voltage	35	70	140	280	420	560	700	V
V_{DC}	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
$I_{F(AV)}$	Average Rectified Output Current (Note 1)@TC=100°C	2.0							A
I_{FSM}	Non-Repetitive Peak Forward Surge Current 8.3ms.Single half sine-wave superimposed on rated load(JEDEC Method)	60							A
I^2t	I^2t Rating for Fusing ($t < 8.3ms$)	14.94							A ² s
V_{FM}	Forward Voltage per element @IF=2.0A	1.05							V
I_R	Peak Reverse Current @TA=25°C At Rated DC Blocking Voltage @TA=125°C	5 500							μA
$R_{\theta JA}$	Typical Thermal Resistance per leg (Note 2)	30							°C/W
$R_{\theta JL}$		11							°C/W
T_J	Operating Junction Temperature	150							°C
T_{STG}	Storage Temperature Range	-55 to+150							°C

Note:1. Mounted on glass epoxy PC board with 1.3mm² solder pad.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C..

Typical Performance Characteristics

Fig. 1 Forward Current Derating Curve

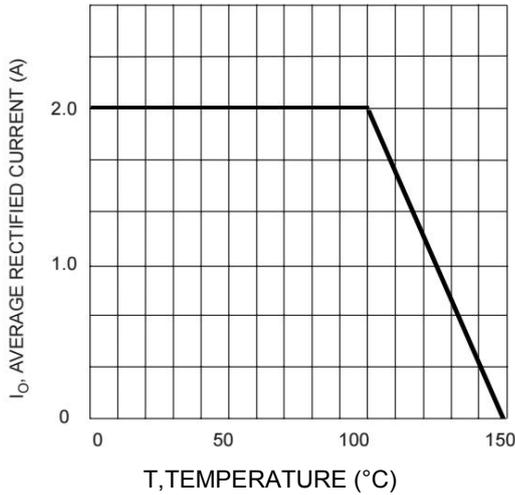


Fig. 2 Typical Fwd Characteristics

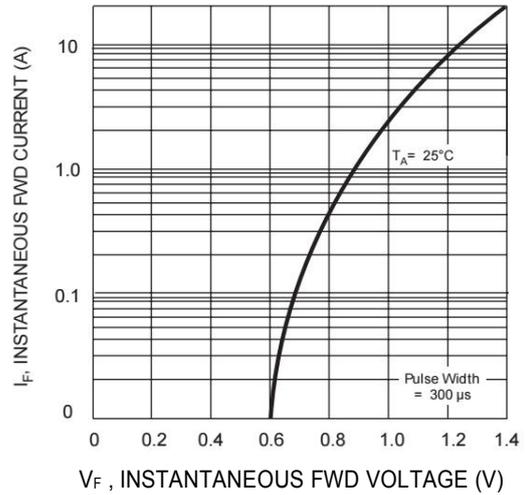


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

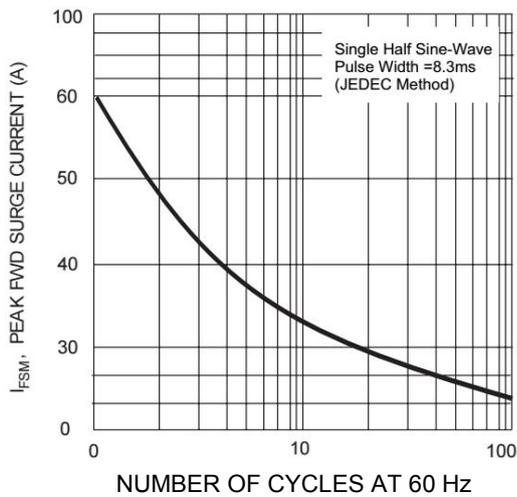


Fig. 4 Typical Junction Capacitance

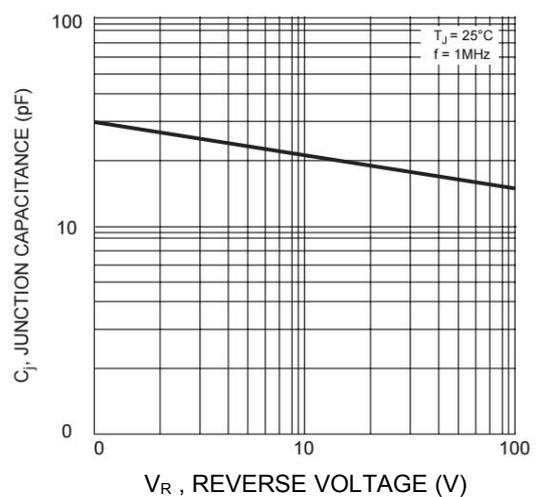


Fig.5 Typical Reverse Characteristics (per element)

