

# GBP1005-GBP110

Silicon Bridge Rectifiers

**VOLTAGE RANGE: 50 --- 1000 V**

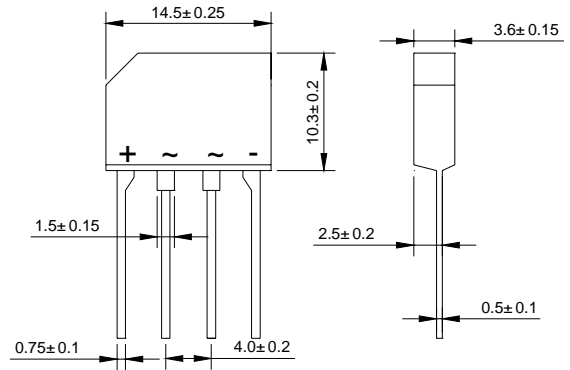
**CURRENT: 1.0 A**



## GBP

### Features

- ◇ Rating to 1000V PRV
- ◇ Surge overload rating to 50 Amperes peak
- ◇ Ideal for printed circuit board
- ◇ Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- ◇ Lead solderable per MIL-STD-202 method 208
- ◇ Plastic material has UL flammability classification 94V-O
- ◇ Glass passivated junction
- ◇ Weight: 0.05 ounces, 1.52 grams



Dimensions in millimeters

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

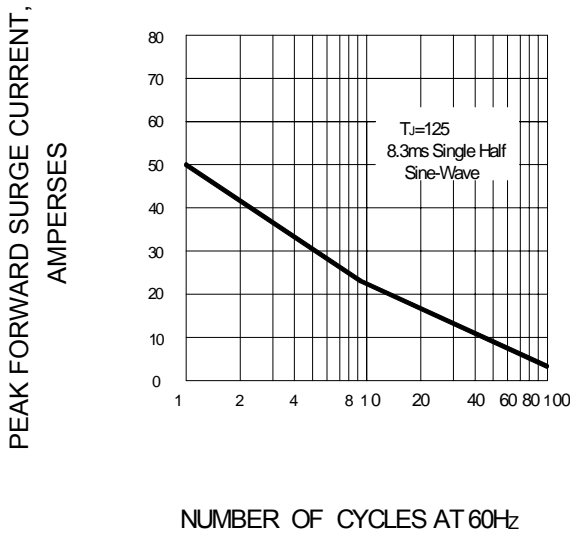
Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

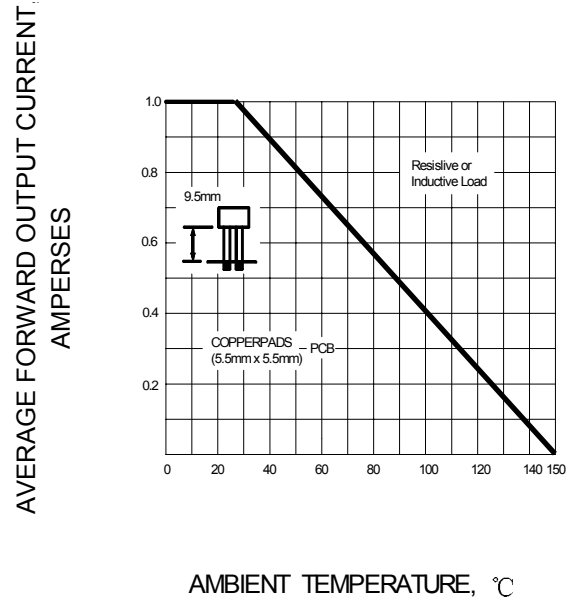
		GBP 1005	GBP 101	GBP 102	GBP 104	GBP 106	GBP 108	GBP 110	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward Output current @ $T_A=25^\circ\text{C}$	$I_{F(AV)}$	1.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	$I_{FSM}$	50							A
Maximum instantaneous forward voltage @ 0.5 A	$V_F$	1.05							V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	$I_R$	10.0 1.0							$\mu\text{A}$ mA
Operating junction temperature range	$T_J$	- 55 ---- + 150							°C
Storage temperature range	$T_{STG}$	- 55 ---- + 150							°C

## Ratings AND Characteristic Curves

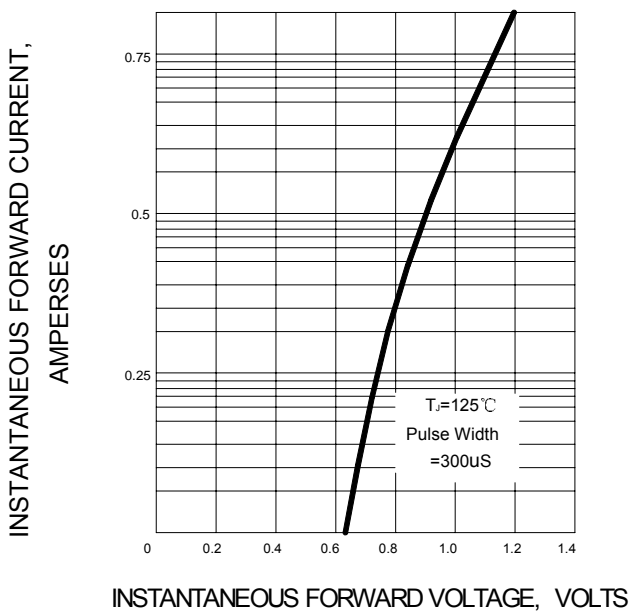
**FIG.1 – PEAK FORWARD SURGE CURRENT**



**FIG.2 – FORWARD DERATING CURVE  
OUTPUT RECTIFIED CURRENT**



**FIG.3 – TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**

