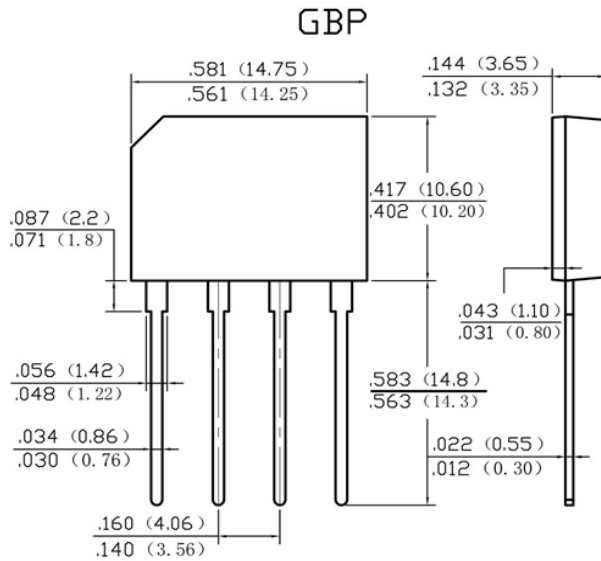


## SILICON PHASE 4.0AMP GLASS PASSIVATED BRIDGE RECTIFIERS

### GBP4005 thru GBP410 SERIES 50 to 1000 V 4.0 A

#### FEATURES

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



#### Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase , half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	GBP 4005	GBP 401	GBP 402	GBP 404	GBP 406	GBP 408	GBP 410	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$								V
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	
DC Blocking Voltage	$V_{DC}$								
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
<b>Maximum Average Forward Rectified Current</b> .375"(9.5mm) Lead Length at $T_A=50^\circ\text{C}$	$I_o$	4.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150							A
Forward Voltage per element @ $I_F=4.0\text{A}$	$V_{FM}$	1.1							V
Peak Reverse Current @ $T_A=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	$I_r$	5.0 500							$\mu\text{A}$
Typical Junction Capacitance (Note 1)	$C_J$	25							pF
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JA}$	40							°C/W
	$R_{\theta JL}$	20							
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55to+150							°C

#### Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Device mounted on 50mm x 50mm X 1.6mm Cu Plate Heatsink.

Fig. 1 Forward Current Derating Curve

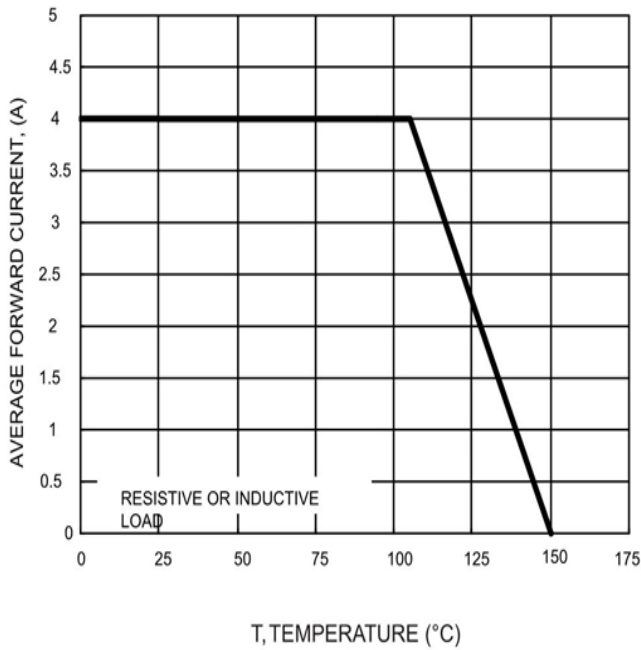


Fig. 2 — Maximum Non-Repetitive Peak Forward Surge Current Per Leg

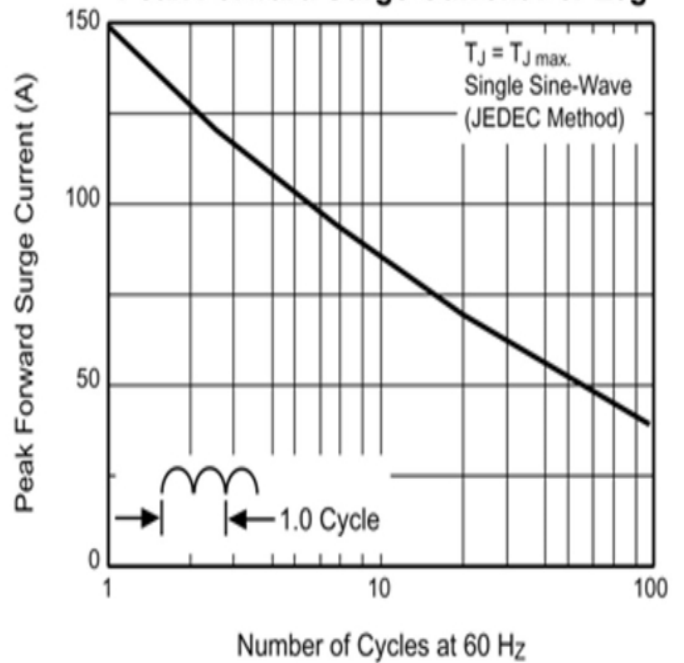


Fig. 3 Typical Fwd Characteristics

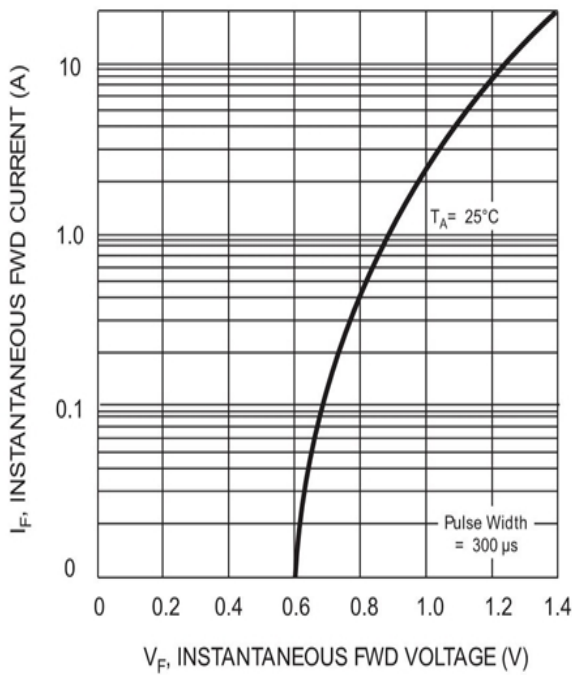


Fig. 4 Typical Junction Capacitance

