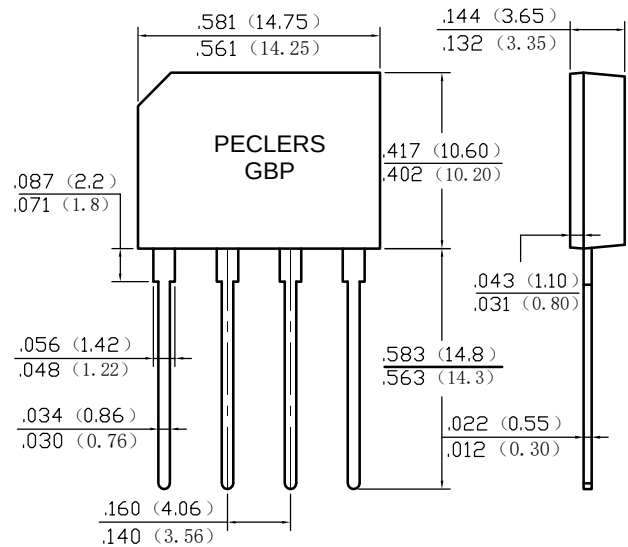


Features

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

Mechanical Data

- Case: GBP, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number
- Lead Free: For RoHS / Lead Free Version



Dimensions in inches and (millimeters)

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%.

TYPE NUMBER	SYMBOL	GBP 4005 L	GBP 401 L	GBP 402L	GBP 404L	GBP 406 L	GBP 408 L	GBP 410L	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
	V _{RWM}								
	V _{DC}								
RMS Reverse Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at T _A =50°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 @IF=4.0A	V _{FM}	0.9							V
Peak Reverse Current @T _A =25°C At Rated DC Blocking Voltage @T _A =125°C	I _R	5.0 500							uA
Typical Junction Capacitance (Note 1)	C _J	25							pF
Typical Thermal Resistance per leg (Note 2)	R _{θJA}	40							°C/W
	R _{θJL}	20							
Operating and Storage Temperature Range	T _J , T _{STG}	-55to+150							°C

NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance Junction to Ambient and form junction to lead at 0.375"(9.5mm) lead length P.C.B. Mounted.

Fig. 1 Forward Current Derating Curve

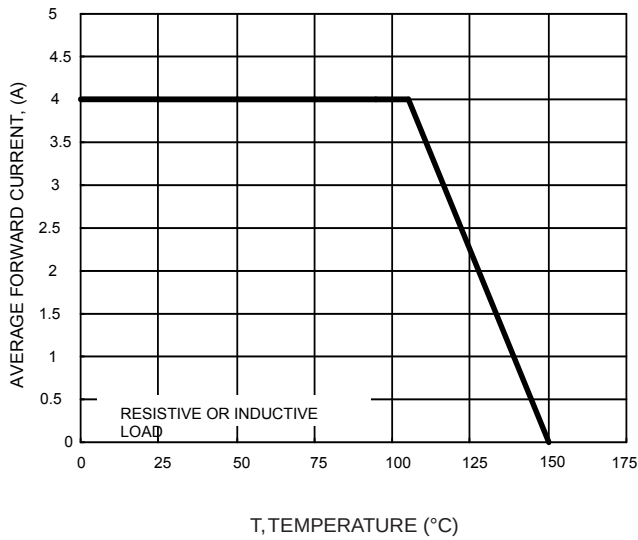


Fig. 2 — Maximum Non-Repetitive Peak Forward Surge Current Per Leg

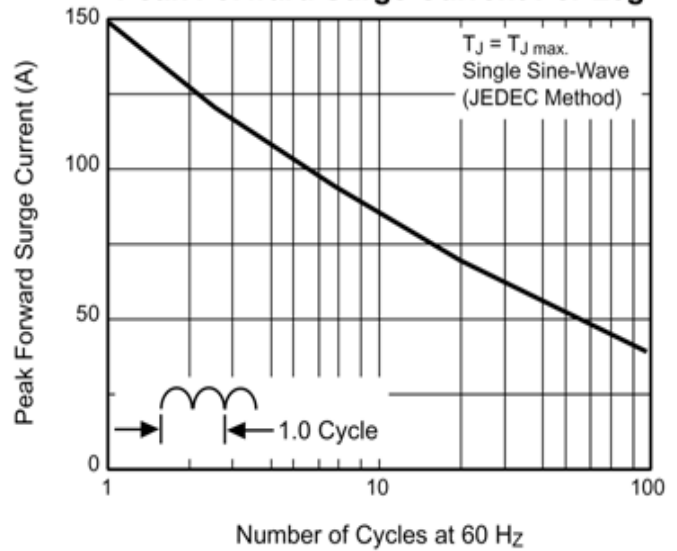


Fig. 3 Typical Fwd Characteristics

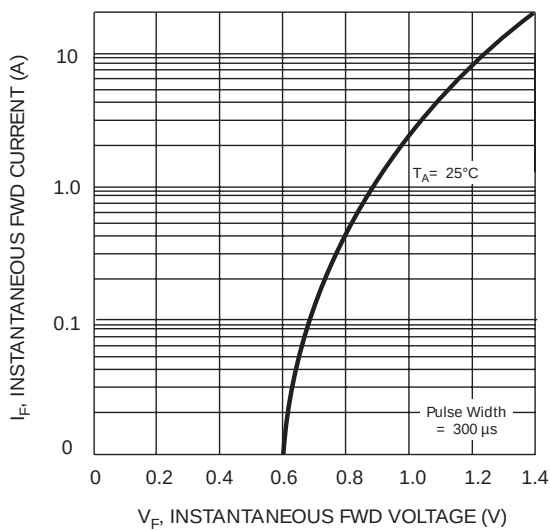


Fig. 4 Typical Junction Capacitance

