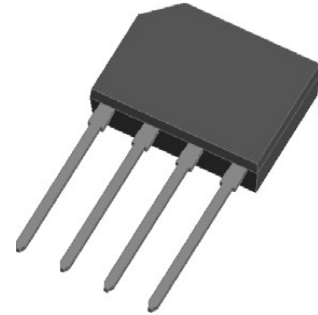


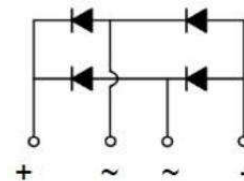
### 4A Single Phase Bridge Rectifier

#### Features

- Ideal for printed circuit boards
- High case dielectric strength
- Reverse Voltage : 50 to 1000V
- Forward Current : 4A
- High temperature soldering : 260°C/10s at terminals



GBP



#### Applications

- General purpose use in AC/DC bridge full wave rectification for printer, power supply, switching mode power supply, adapter, and home appliances applications.

#### 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 current derate by 20 %.

Parameter	Symbol	GBP 4005	GBP 401	GBP 402	GBP 404	GBP 406	GBP 408	GBP 410	Unit
Maximum Repetitive 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 Rectified Current @ $T_C=100^\circ\text{C}$ with heatsink (Note 1)	$I_{F(AV)}$	4.0							A
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load(JEDEC method)	$I_{FSM}$	135							A
Rating for fusing ( $t < 8.3\text{ms}, T_j = 25^\circ\text{C}$ )	$I^2t$	75							$\text{A}^2\text{s}$
Maximum Instantaneous Forward Voltage @4.0A	$V_F$	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	10							$\mu\text{A}$
	$T_A=125^\circ\text{C}$	1000							
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	55							$^\circ\text{C}/\text{W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	(-55 to +150)							$^\circ\text{C}$

#### Notes:

1. Thermal resistance from Junction to Ambient on P.C.board mounting.

### Ratings and Characteristic Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)

FIG.1 - Typical forward current derating curve

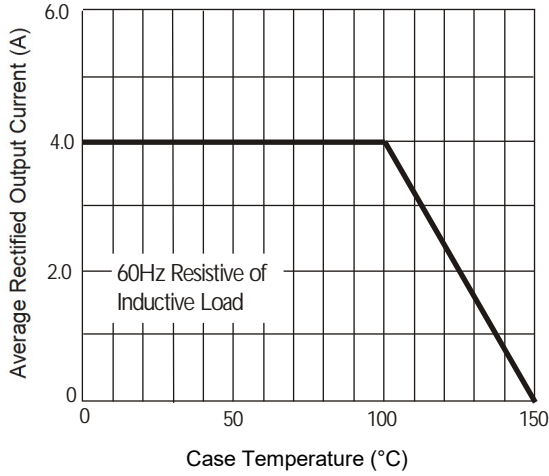


FIG.2 - Maximum Non-Repetitive Peak Forward Surge Current

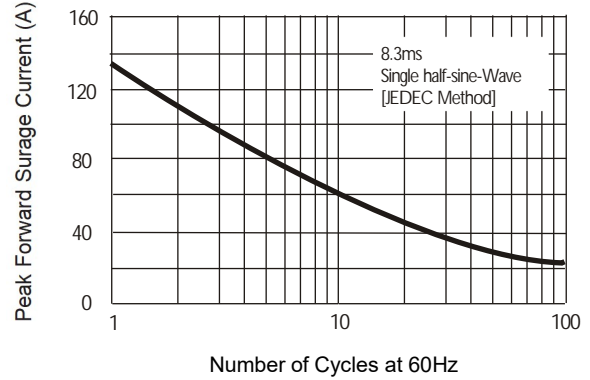


FIG.3 - Typical Junction Capacitance

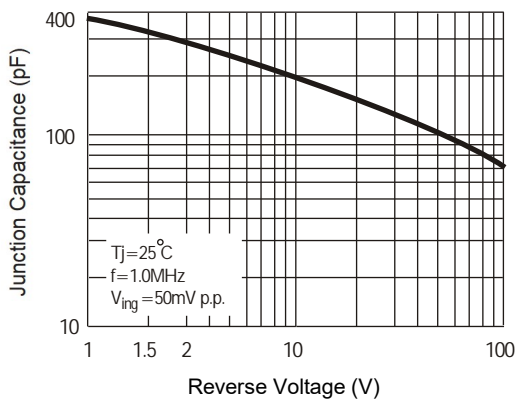


FIG.4 - Typical Instantaneous Forward Characteristics

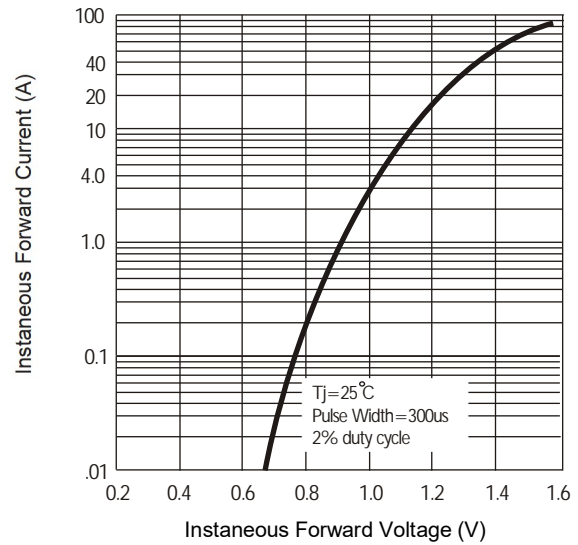
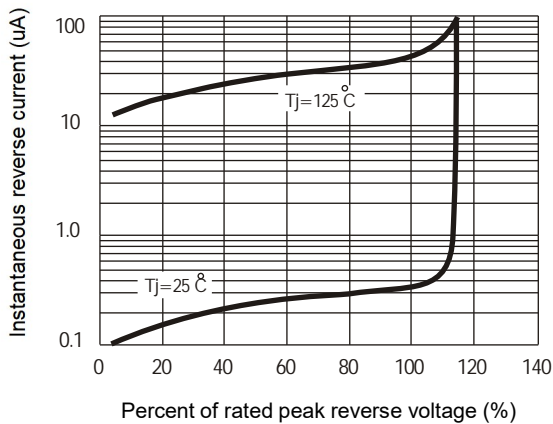
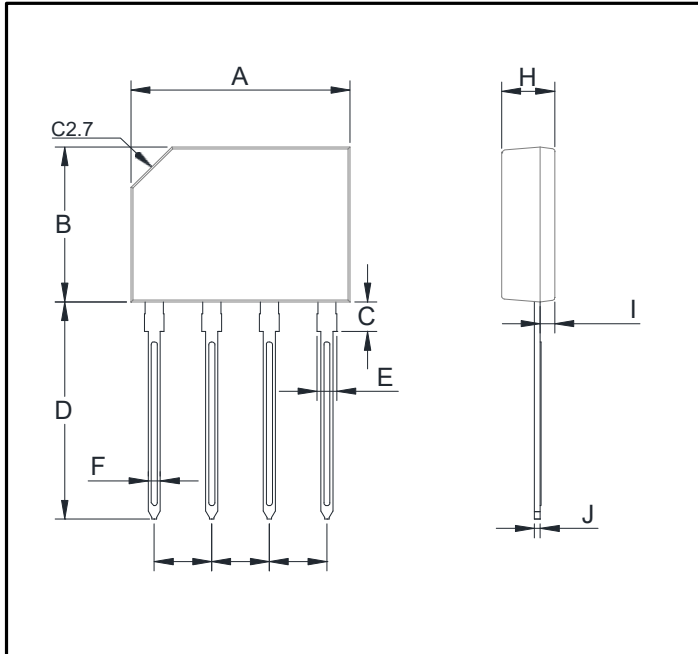


FIG.5 - Typical reverse Characteristics



**Package Outlines (Dimensions in mm)**

Plastic surface mounted package(GBP)



Dim	GBP	
	Min	Max
A	13.8	14.2
B	10.4	10.8
C	1.80	2.20
D	12.7	13.7
E	1.3	1.5
F	0.68	0.88
G	3.60	4.0
H	3.0	3.4
I	0.7	1.0
J	0.25	0.45

**\*Important Usage Information and Disclaimer**

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