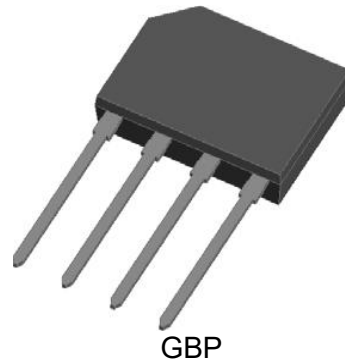


6A Single Phase Bridge Rectifier

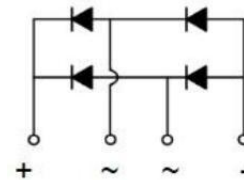
Features

- Ideal for printed circuit boards
- High case dielectric strength
- Reverse Voltage : 50 to 1000V
- Forward Current : 6A
- High temperature soldering : 260°C/10s at terminals



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 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Type Number	Symbol	GBP 6005	GBP 601	GBP 602	GBP 604	GBP 606	GBP 608	GBP 610	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 @ $T_c=50^\circ\text{C}$ with heat sink (Note 1)	$I_{F(AV)}$	6.0							A
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load(JEDEC method)	I_{FSM}	150							A
Maximum Instantaneous Forward Voltage @6.0A	V_F	1.25							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	10							μA
	$T_A=100^\circ\text{C}$	1000							
Maximum reverse recovery time at $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$	T_{RR}	350							ns
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

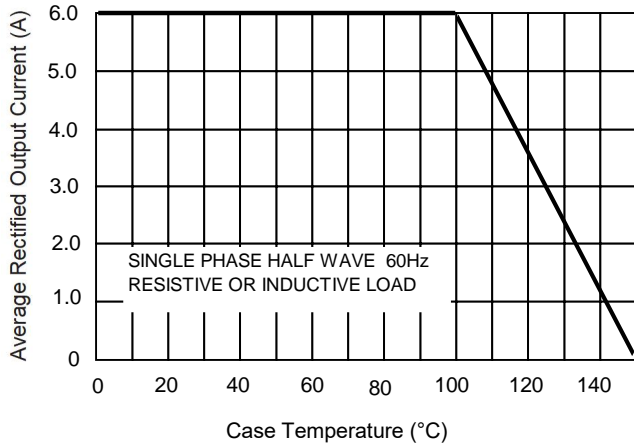


FIG.2 - Maximum Non-Repetitive Peak Forward Surge Current

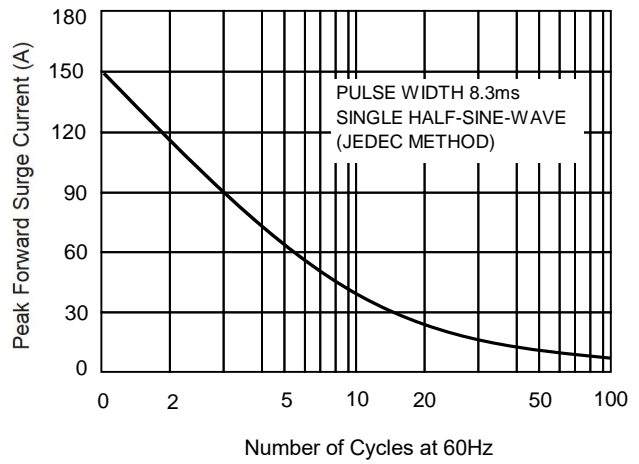


FIG.3-Typical Junction Capacitance

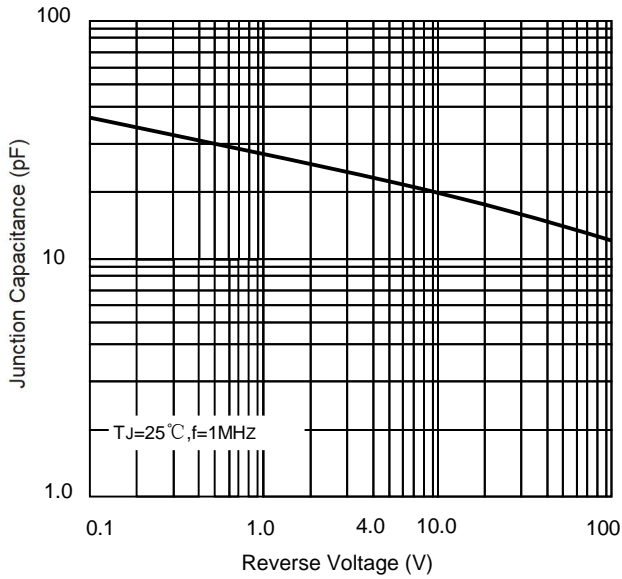


FIG.4 - Typical Instantaneous Forward Characteristics

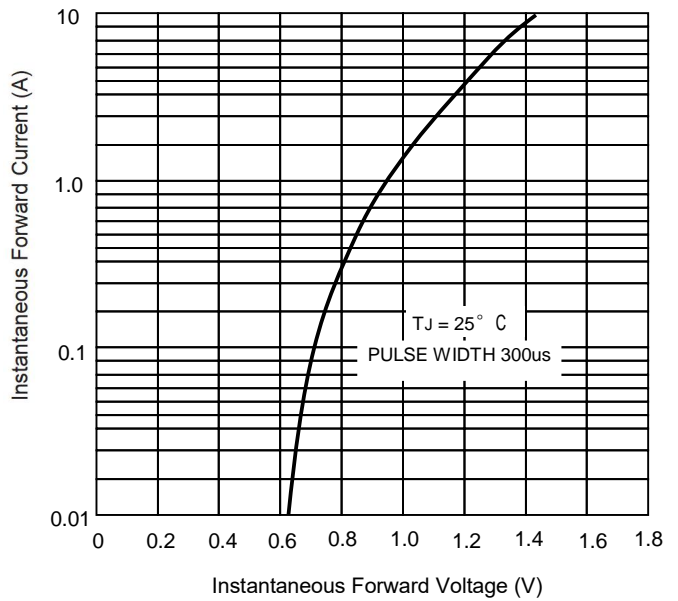
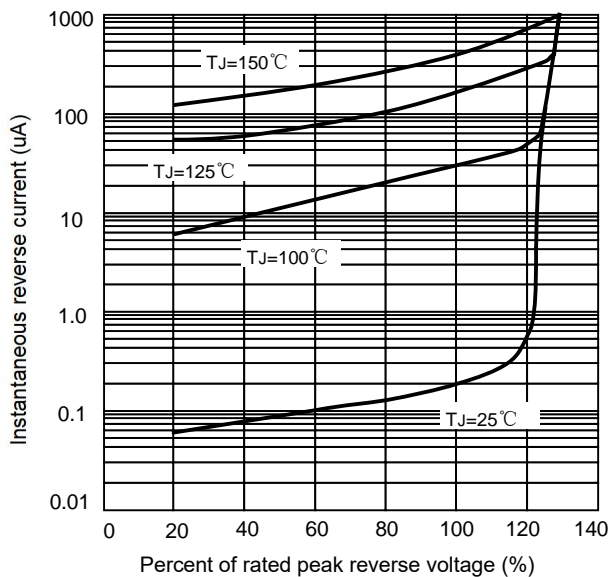


FIG.5 - Typical reverse Characteristics



Package Outlines (Dimensions in mm)

Plastic surface mounted package(GBP)



GBP		
Dim	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

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