

GBP2005 THRU GBP210

Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts Forward Current - 2.0 Amperes

Features

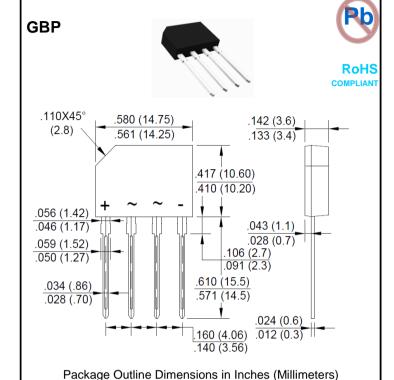
- Glass passivated chip
- Low forward voltage drop
- Ideal for printed circuit board
- •Meet UL flammability classification 94V-0

Mechanical Data

- Polarity: Symbol marked on body
- Mounting position: Any

Applications

 General purpose use in AC/DC bridge full wave rectification, for home appliances, office equipment, etc.



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

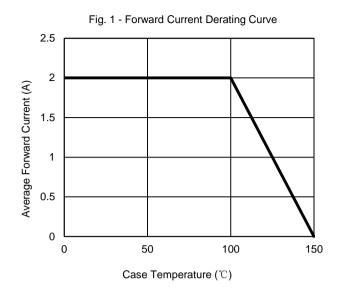
Single phase, half wave, 60Hz, resistive or inductive load.

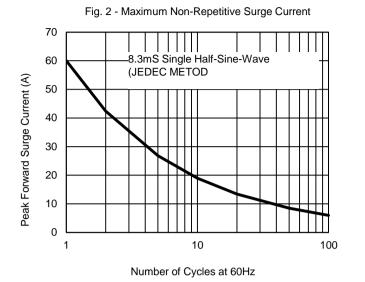
For capacitive load, derate current by 20%.

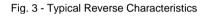
Characteristics	Symbol	GBP	GBP	GBP	GBP	GBP	GBP	GBP	Unit
	Symbol	2005	201	202	204	206	208	210	
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @Tc=100 °C	I(AV)	2.0							Α
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave,	IFSM 60								A
Superimposed on Rated Load (JEDEC Method)	IFSIVI			00					
Peak Forward Surge Current, 1mS Single Half Sine-Wave,	IFSM	120							А
Superimposed on Rated Load (JEDEC Method)	175WI 12U								
I^2 t Rating for Fusing(1ms \leq t \leq 8.3ms)	l ² t	14.9							A ² s
Peak Forward Voltage per Diode at 2.0A DC	VF	1.05							V
Maximum DC Reverse Current at Rated @TJ=25℃	IR	5 500							μА
DC Blocking Voltage per Diode @TJ=125°C	IK IK								
Typical Thermal Resistance to Ambient (without heatsink)	Røja	40							°C/W
Typical Thermal Resistance to case (with heatsink)	Rejc	10							°C/W
Typical Thermal Resistance to lead (without heatsink)	Rejl	5							°C/W
Operating Junction Temperature Range	TJ	-55 to +150							$^{\circ}\!\mathbb{C}$
Storage Temperature Range	Тѕтс	-55 to +150							$^{\circ}\!\mathbb{C}$
Note: The femile of data above in femile femile and	•								-

Note: The typical data above is for reference only









TJ=150° C

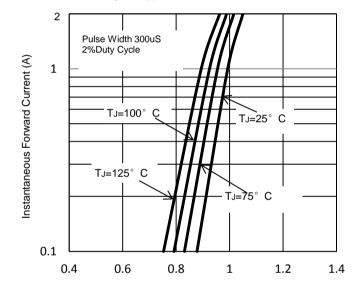
TJ=125° C

TJ=125° C

TJ=25° C

TJ=25° C

Fig. 4 - Typical Forward Characteristics



Percent of Rated Peak Reverse Voltage (%)

60

80

100

40

0.1

20



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