

GBP Plastic-Encapsulate Bridge Rectifier

GBP2005 THRU GBP210 General Purpose Bridge Rectifier

Features

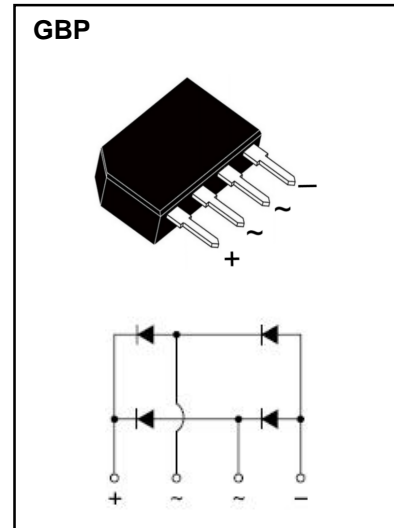
- I_o 2.0A
- V_{RRM} 50V-1000V
- High surge current capability
- Glass passivated chip

Applications

- General purpose 1 phase Bridge rectifier applications

Marking

- GBP2XX
- XX : From 005 To 10



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	GBP2						
				005	01	02	04	06	08	10
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
Average Rectified Output Current	I_o	A	60Hz sine wave, R-load	$T_c=100^\circ\text{C}$		2.0				
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz sine wave, 1 cycle, $T_j=25^\circ\text{C}$		60					
Current Squared Time	I^2t	A^2S	$1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$, Rating of per diode		15					
Storage Temperature	T_{stg}	$^\circ\text{C}$	-55 ~+150							
Junction Temperature	T_j	$^\circ\text{C}$	-55 ~+150							

Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	V_{FM}	V	$I_{FM}=2.0\text{A}$, Pulse measurement, Rating of per diode	1.1
Peak Reverse Current	I_{RRM}	μA	$V_{RM}=V_{RRM}$, Pulse measurement, Rating of per diode	10
Thermal Resistance	$R_{\theta J-A}$	$^\circ\text{C/W}$	Between junction and ambient	47
	$R_{\theta J-C}$		Between junction and lead	10

Typical Characteristics

FIG.1-FORWARD CURRENT DERATING CURVE

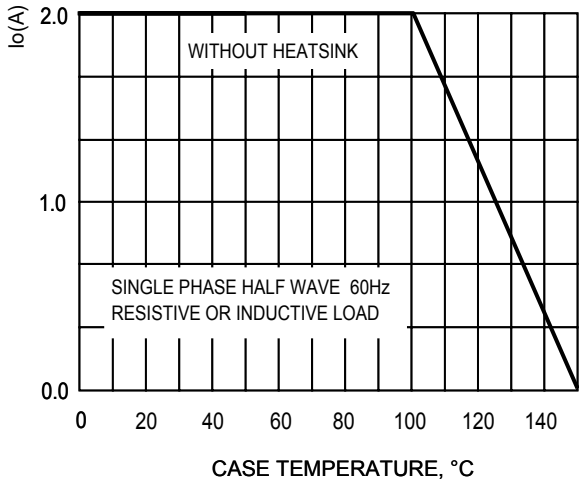


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

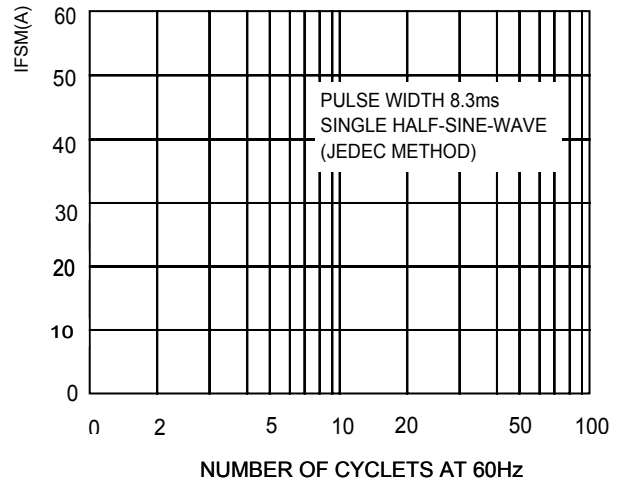


FIG.3-TYPICAL JUNCTION CAPACITANCE

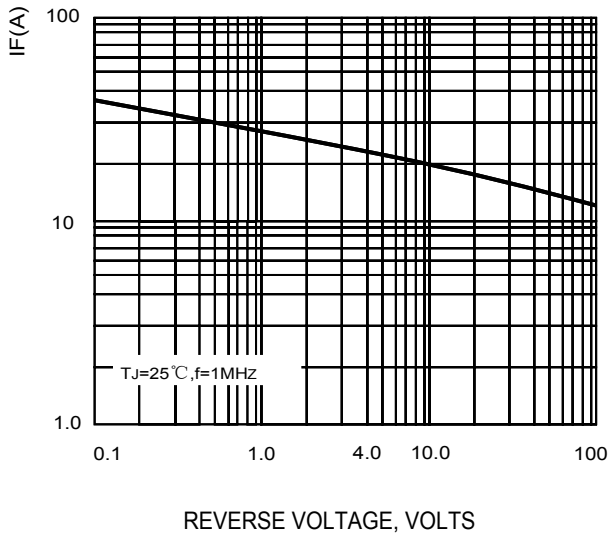


FIG.4-TYPICAL FORWARD CHARACTERISTICS

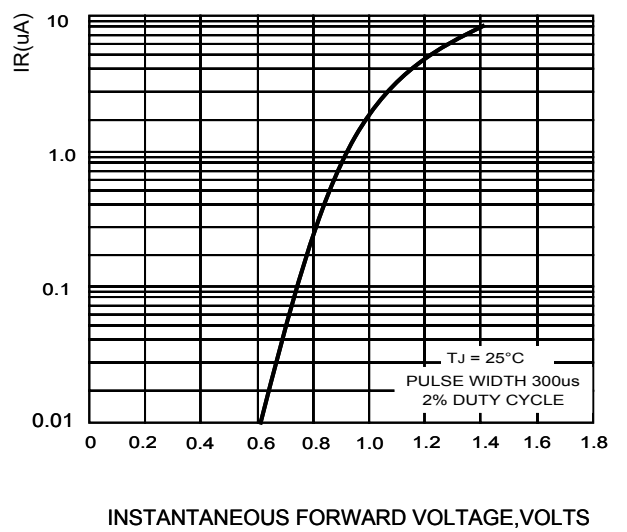
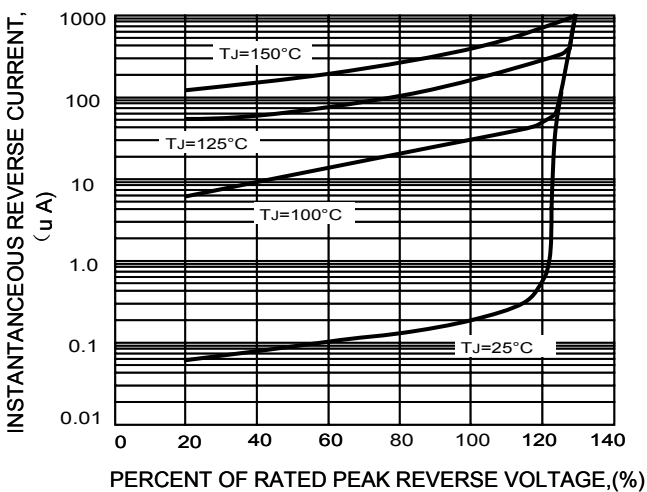
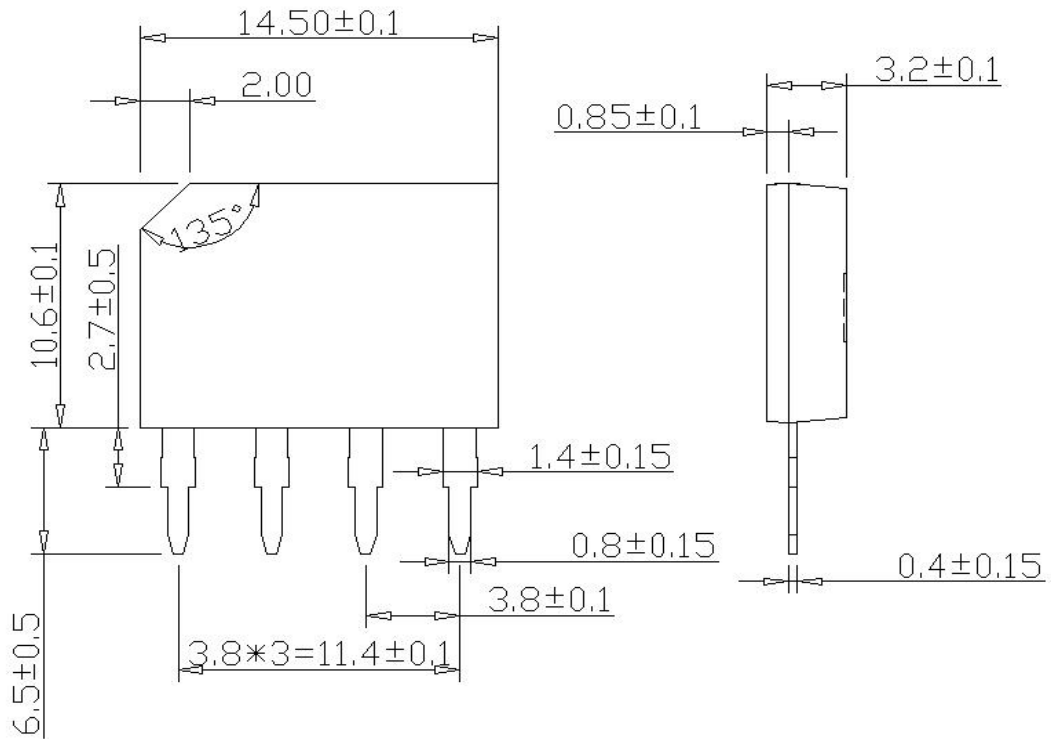


FIG.5-TYPICAL REVERSE CHARACTERISTICS



The cruve graph is for reference only, can't be the basis for judgment

GBP Package Outline Dimensions



Dimensions in inches and (millimeters)

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