

## GBP Plastic-Encapsulate Bridge Rectifier

General Purpose Bridge Rectifier

### Features:

- $I_O$  4A
- $V_{RRM}$  50V-1000V
- High surge current capability
- Glass passivated chip

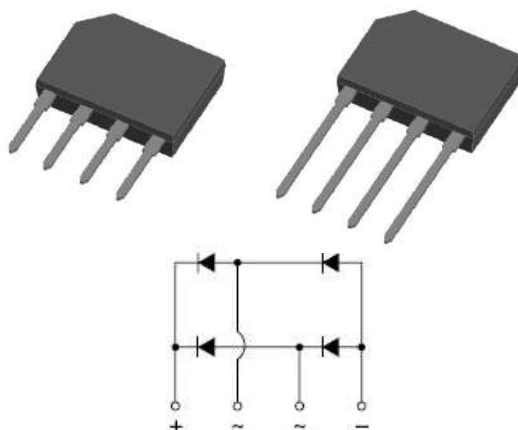
### Applications:

- General purpose 1 phase Bridge rectifier applications

### Marking

- GBP4XX
- XX : From 005 To 10

GBP



### Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	GBP4						
				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, $T_a=50^\circ\text{C}$	4.0						
Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	60Hz half-sine wave, 1 cycle, $T_j=25^\circ\text{C}$	150						
Current Squared Time	$I^2t$	$\text{A}^2\text{S}$	$1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$ , Rating of per diode	64.8						
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	$I_{FM}=4.0\text{A}$ , Pulse measurement, Rating of per diode	1.1
Peak Reverse Current	$I_{RRM}$	$\mu\text{A}$	$V_{RM}=V_{RRM}$ , Pulse measurement, Rating of per diode	5
Thermal Resistance	$R_{\theta J-A}$	$^\circ\text{C/W}$	Between junction and ambient	47
	$R_{\theta J-C}$		Between junction and case	10

**Typical Characteristics**

FIG.1-MAXIMUM NON-REPETITIVE SURGE CURRENT

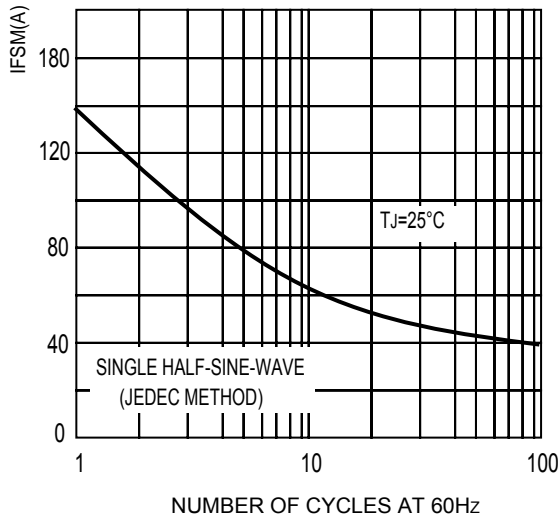


FIG.2-FORWARD DERATING CURRENT

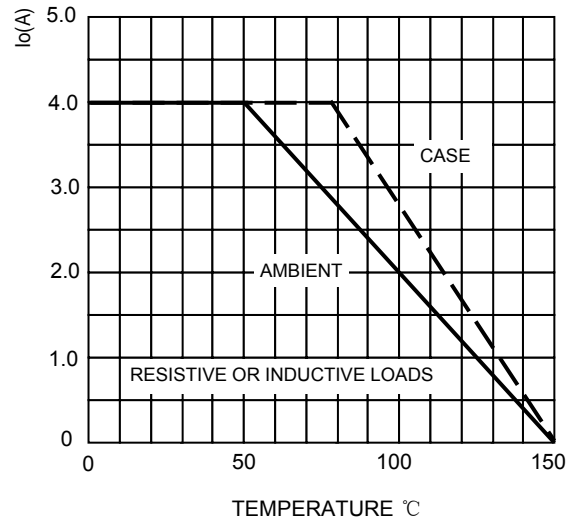


FIG.3-TYPICAL FORWARD CHARACTERISTICS

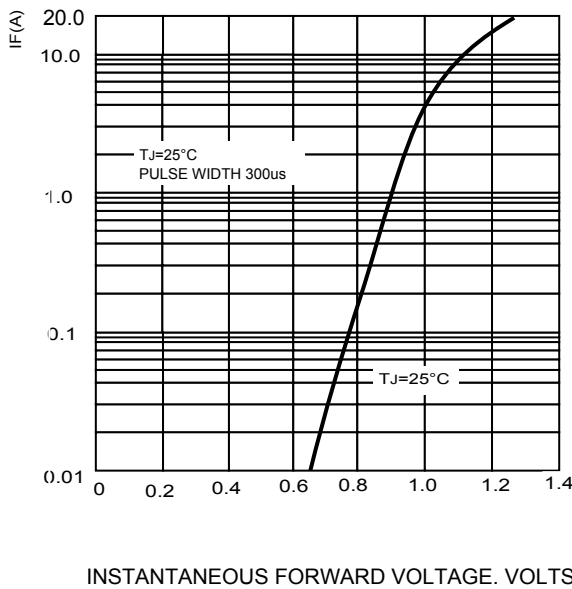
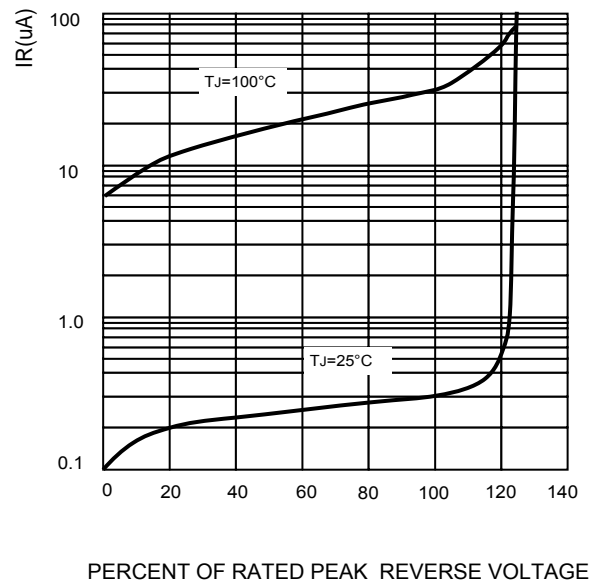
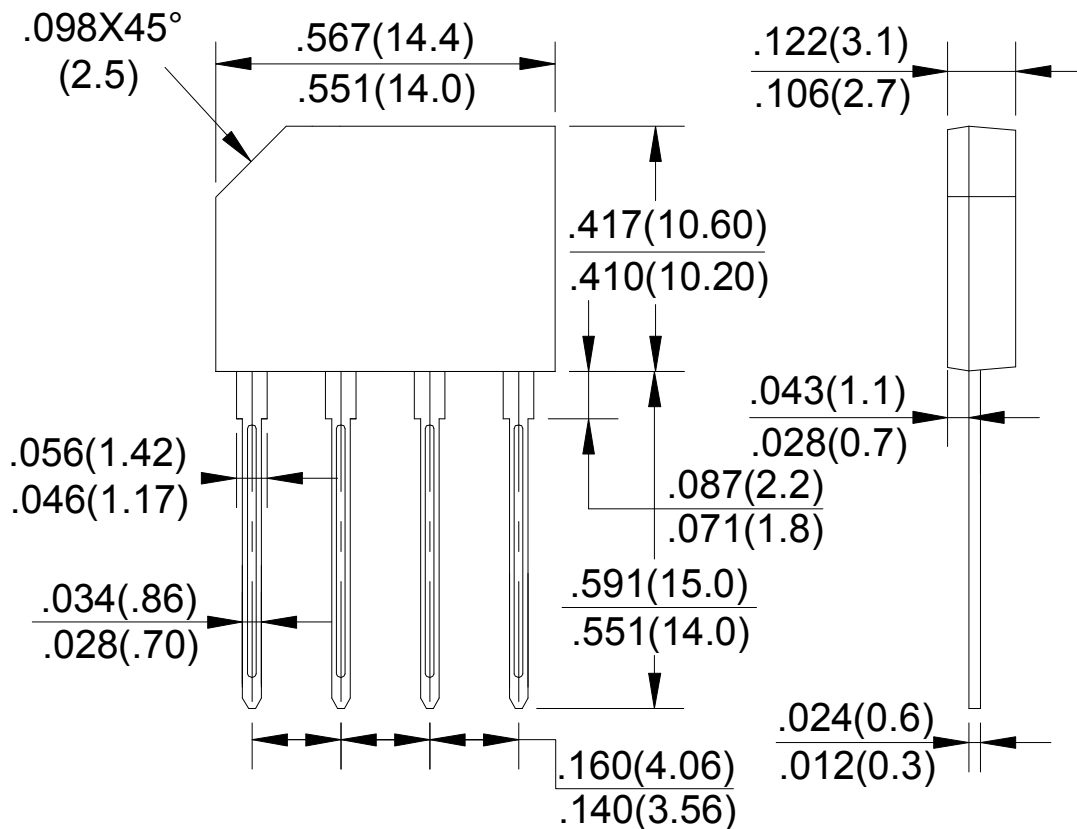
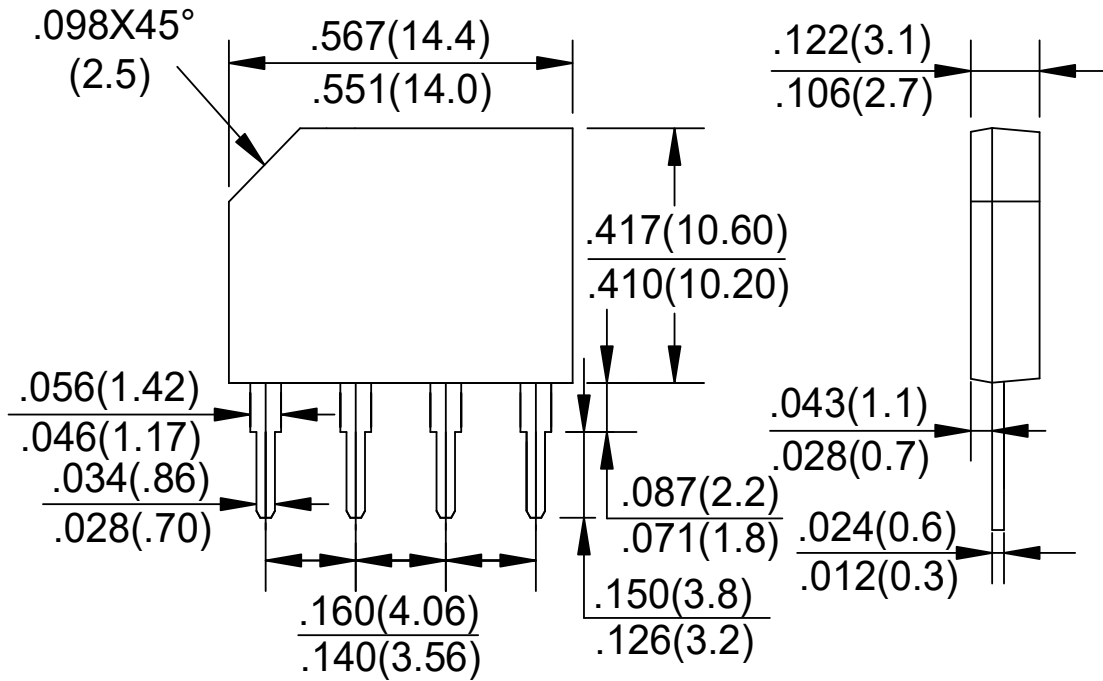


FIG.4-TYPICAL REVERSE CHARACTERISTICS



**GBP Package Outline Dimensions**



Dimensions in inches and (millimeters)