



**GBP Plastic-Encapsulate Bridge Rectifier**

**GBP2005 THRU GBP210** General Purpose Bridge Rectifier

**Features**

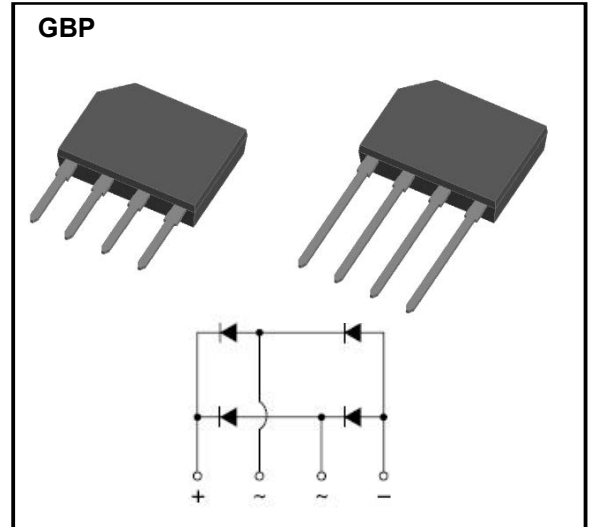
- I<sub>o</sub> 2.0A
- V<sub>RRM</sub> 50V-1000V
- High surge current capability
- Glass passivated chip

**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 <sub>RRM</sub> | V                |   | 50                    | 100 | 200 | 400 | 600 | 800 | 1000 |
| Average Rectified Output Current     | I <sub>o</sub>   | A                | 60Hz sine wave, R-load                                    | T <sub>c</sub> =100°C |     | 2.0 |     |     |     |      |
| Surge(Non-repetitive)Forward Current | I <sub>FSM</sub> | A                | 60Hz sine wave, 1 cycle, T <sub>j</sub> =25°C             |                       | 60  |     |     |     |     |      |
| Current Squared Time                 | I <sup>2</sup> t | A <sup>2</sup> S | 1ms ≤ t < 8.3ms T <sub>j</sub> =25°C, Rating of per diode |                       | 15  |     |     |     |     |      |
| Storage Temperature                  | T <sub>stg</sub> | °C               | -55 ~+150   |                       |     |     |     |     |     |      |
| Junction Temperature                 | T <sub>j</sub>   | °C               | -55 ~+150   |                       |     |     |     |     |     |      |

**Electrical Characteristics** (T<sub>a</sub>=25°C Unless otherwise specified)

| Item                 | Symbol             | Unit | Test Condition   | Max |
|----------------------|--------------------|------|--|-----|
| Peak Forward Voltage | V <sub>FM</sub>    | V    | I <sub>FM</sub> =2.0A, Pulse measurement, Rating of per diode              | 1.1 |
| Peak Reverse Current | I <sub>RRM</sub>   | μ A  | V <sub>RM</sub> =V <sub>RRM</sub> , Pulse measurement, Rating of per diode | 10  |
| Thermal Resistance   | R <sub>θ J-A</sub> | °C/W | Between junction and ambient   | 47  |
|                      | R <sub>θ J-C</sub> |      | Between junction and lead  | 10  |

# Typical Characteristics

FIG.1-FORWARD CURRENT DERATING CURVE

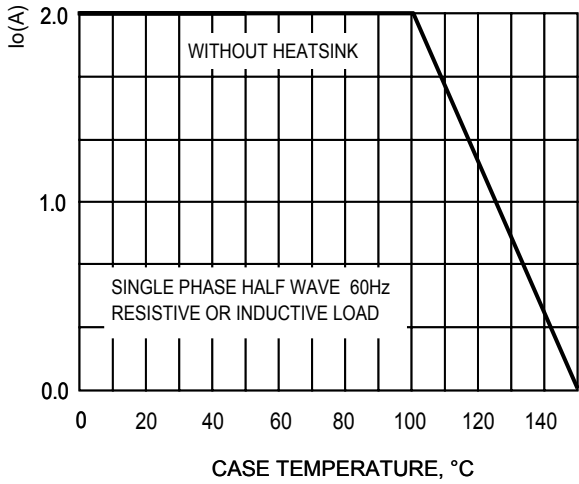


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

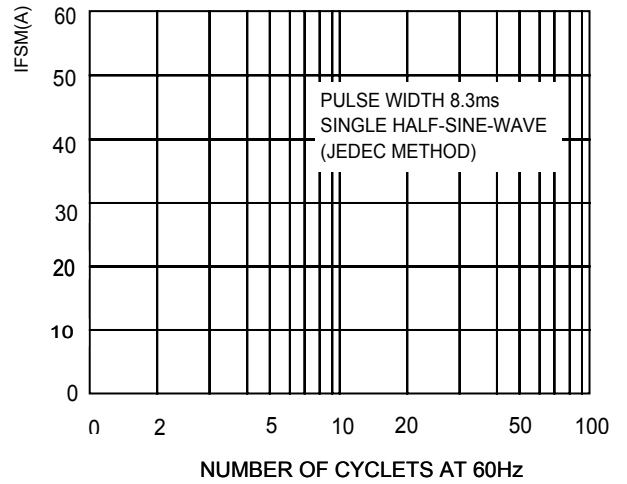


FIG.3-TYPICAL JUNCTION CAPACITANCE

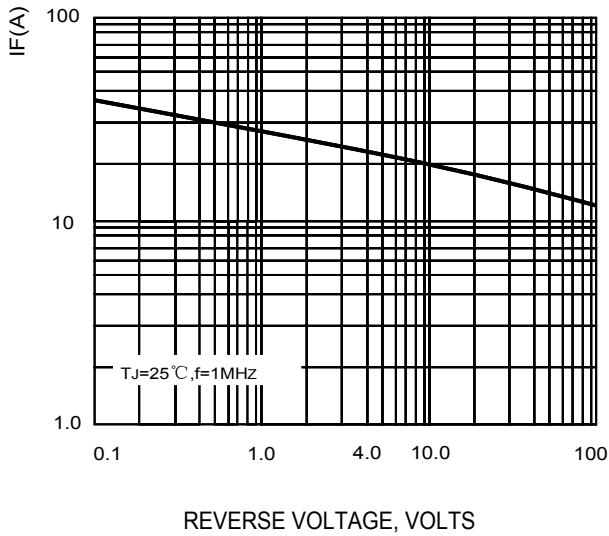


FIG.4-TYPICAL FORWARD CHARACTERISTICS

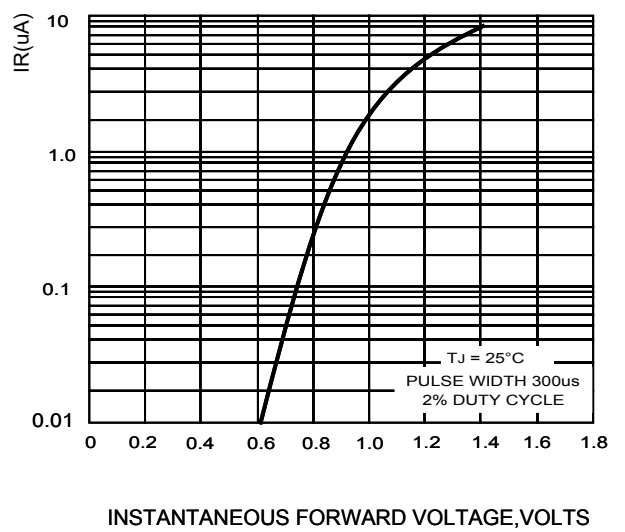
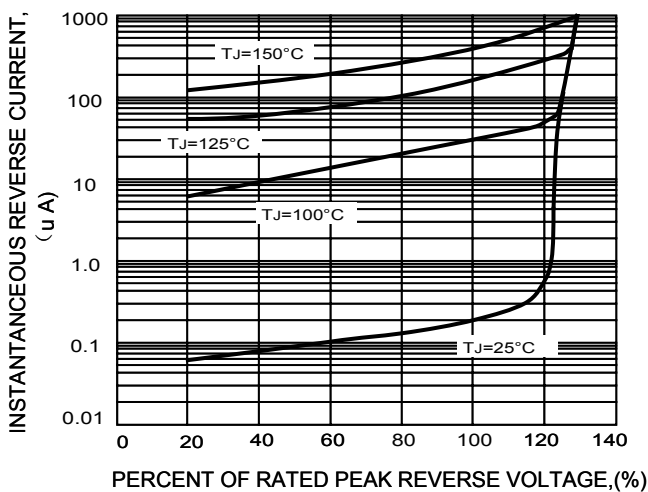
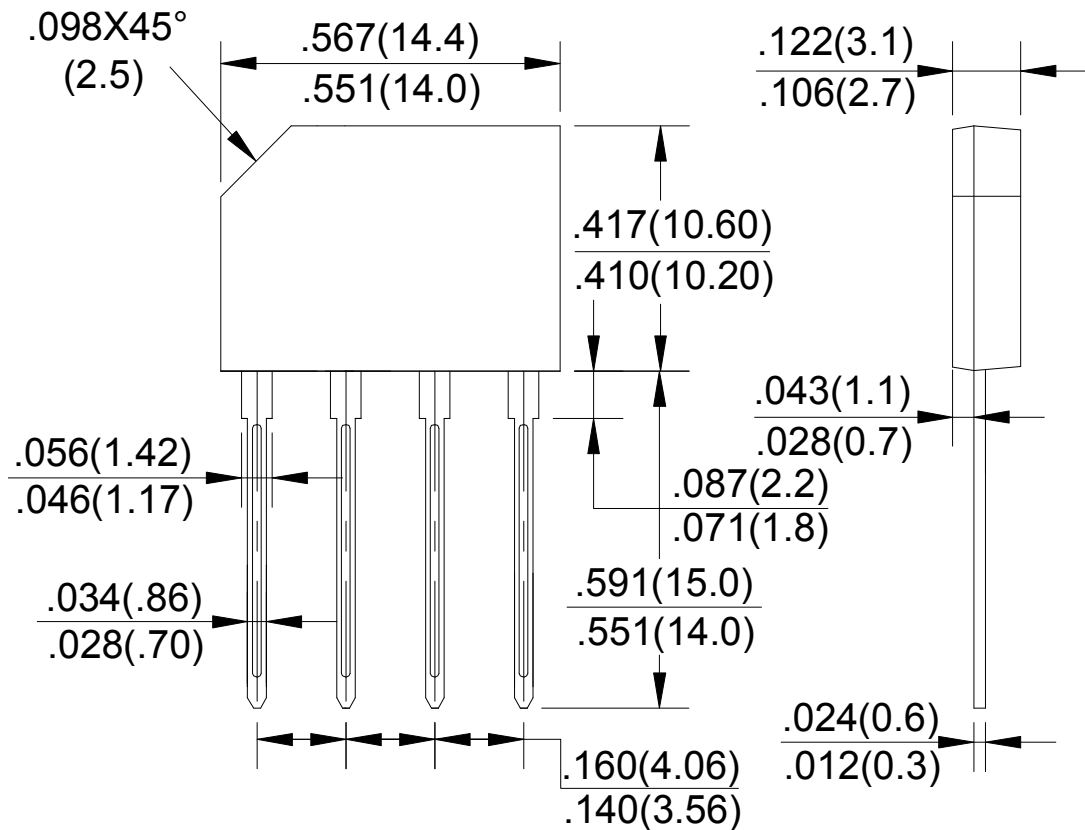
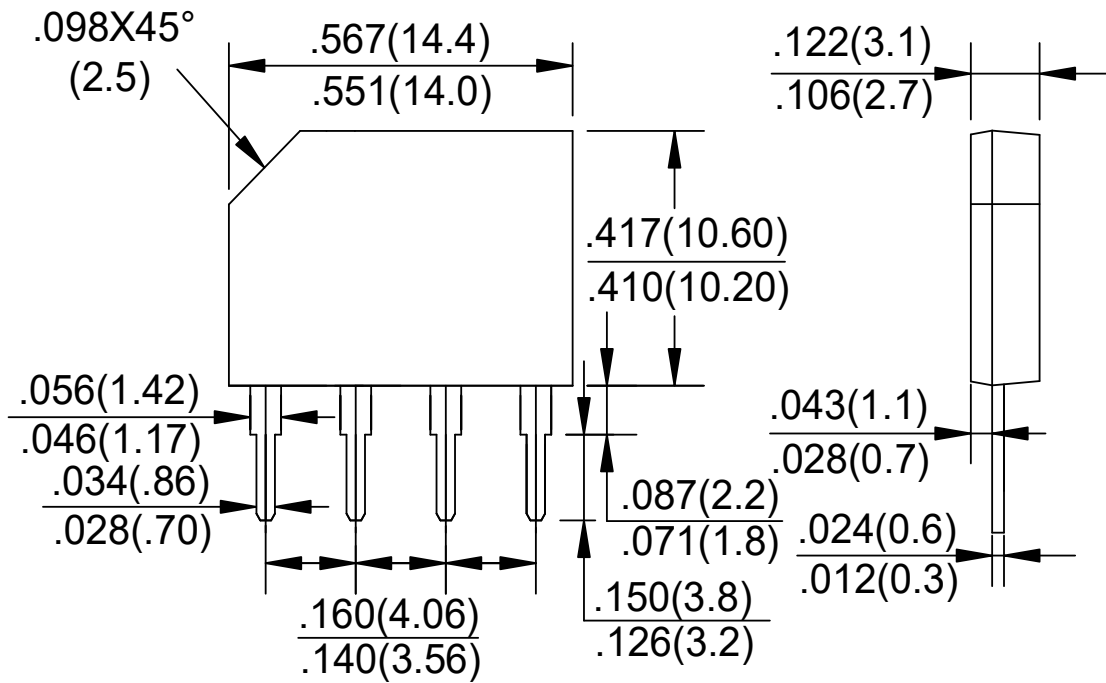


FIG.5-TYPICAL REVERSE CHARACTERISTICS



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

# GBP Package Outline Dimensions



Dimensions in inches and (millimeters)

## NOTICE

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