

## GBPC15005-G Thru. GBPC5010-G Series

Reverse Voltage: 50 to 1000V

Forward Current: 15/25/35/50A

RoHS Device

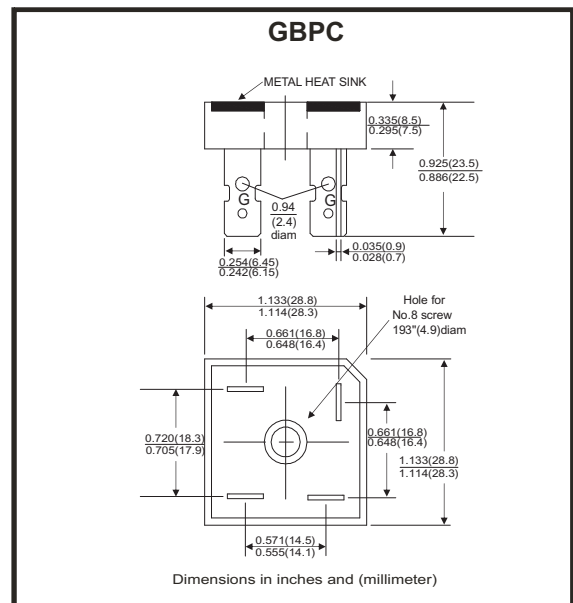


### Features

- Surge overload-300~450 Amperes peak
- Low forward voltage drop
- Electrically isolated base -2000 Volts
- Materials used carries U/L recognition

### Mechanical Data

- Polarit:As marked on Body
- Mounting position:Any
- Weight: 16.57grams



### 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%

| Parameter                               | Symbol    | GBPC-G | GBPC-G | GBPC-G | GBPC-G | GBPC-G | GBPC-G | GBPC-G | Unit |
|-----------------------------------------|-----------|--------|--------|--------|--------|--------|--------|--------|------|
|                                         |           | 15005  | 1501   | 1502   | 1504   | 1506   | 1508   | 1510   |      |
|                                         |           | 25005  | 2501   | 2502   | 2504   | 2506   | 2508   | 2510   |      |
|                                         |           | 35005  | 3501   | 3502   | 3504   | 3506   | 3508   | 3510   |      |
|                                         |           | 50005  | 5001   | 5002   | 5004   | 5006   | 5008   | 5010   |      |
| Maximum Reverse Peak Repetitive Voltage | $V_{RRM}$ | 50     | 100    | 200    | 400    | 600    | 800    | 1000   | V    |
| Maximum RMS Bridge Input Voltage        | $V_{RRM}$ | 35     | 70     | 140    | 280    | 420    | 560    | 700    | V    |
| Maximum DC Blocking Voltage             | $V_{DC}$  | 50     | 100    | 200    | 400    | 600    | 800    | 1000   | V    |

| Parameter                                                                                  | Symbol    | GBPC15      | GBPC25 | GBPC35 | GBPC50 | Unit               |
|--------------------------------------------------------------------------------------------|-----------|-------------|--------|--------|--------|--------------------|
| Maximum Average Forward Rectified Output Current @ $T_c=55^{\circ}\text{C}$                | $I_{AV}$  | 15          | 25     | 35     | 50     | A                  |
| Peak Forward Surge Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load       | $I_{FSM}$ | 300         | 350    | 400    | 450    | A                  |
| Maximum Forward Voltage Drop Per Element at 7.5/12.5/17.5/25.0A Peak                       | $V_F$     | 1.1         |        |        |        | V                  |
| Maximum Reverse Current at rate DC Blocking Voltage Per Element @ $T_J=25^{\circ}\text{C}$ | $I_R$     | 10.0        |        |        |        | $\mu\text{A}$      |
| Operating Temperature Range                                                                | $T_J$     | -55 to +150 |        |        |        | $^{\circ}\text{C}$ |
| Storage Temperature Range                                                                  | $T_{STG}$ | -55 to +150 |        |        |        | $^{\circ}\text{C}$ |

# Glass Passivated Bridge Rectifiers



SMD Diodes Specialist

## Rating and Characteristics Curves (GBPC10005-G Thru. GBPC5010-G Series)

Fig. 1- Dearting Current Output Rectified Current

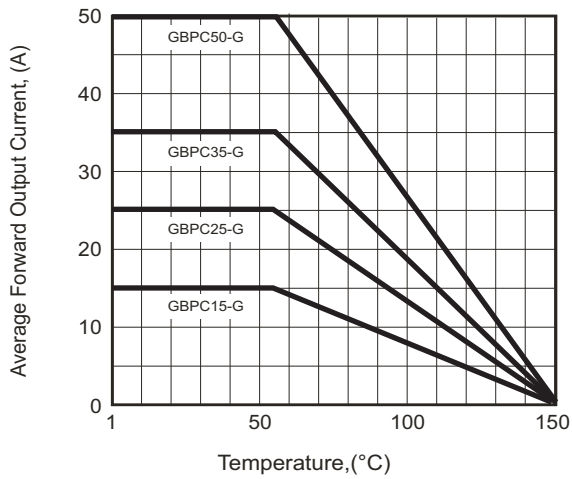


Fig.2- Typical Forward Characteristics

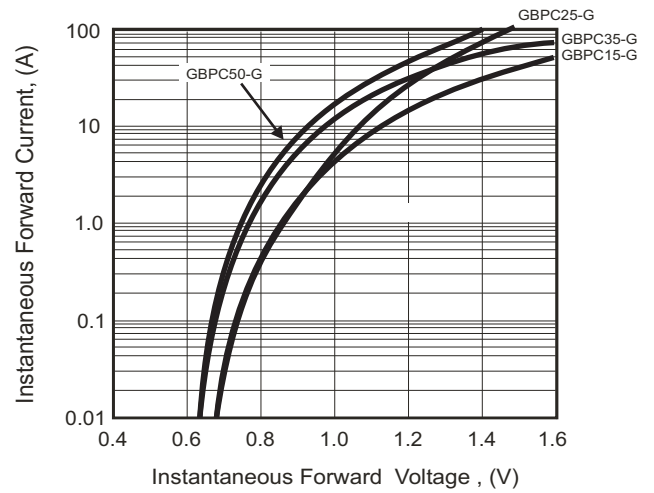


Fig. 3-Maximum Forward Surge Current

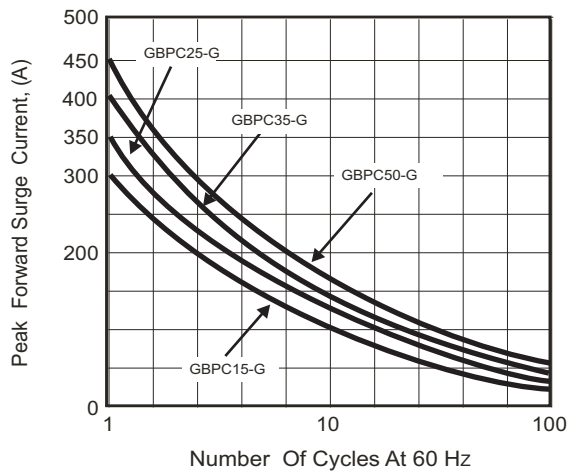
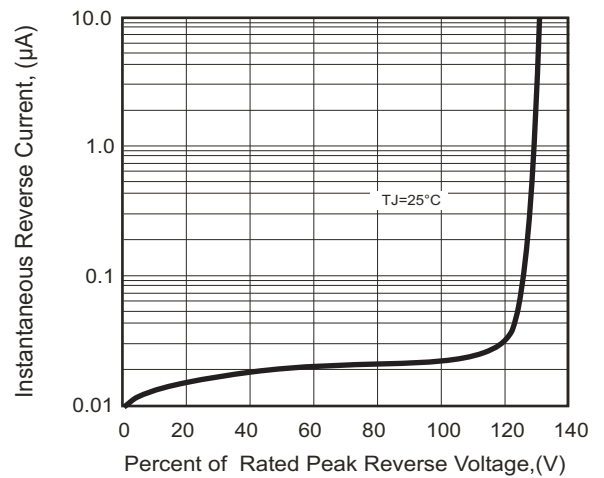
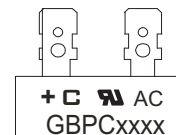


Fig.4- Typical Reverse Characteristics



## Marking Code

| Part Number | Marking code |
|-------------|--------------|
| GBPC15005-G | GBPC15005    |
| GBPC25005-G | GBPC25005    |
| GBPC35005-G | GBPC35005    |
| GBPC50005-G | GBPC50005    |
| GBPC1501-G  | GBPC1501     |
| GBPC2501-G  | GBPC2501     |
| GBPC3501-G  | GBPC3501     |
| GBPC5001-G  | GBPC5001     |
| GBPC1502-G  | GBPC1502     |
| GBPC2502-G  | GBPC2502     |
| GBPC3502-G  | GBPC3502     |
| GBPC5002-G  | GBPC5002     |
| GBPC1504-G  | GBPC1504     |
| GBPC2504-G  | GBPC2504     |
| GBPC3504-G  | GBPC3504     |
| GBPC5004-G  | GBPC5004     |
| GBPC1506-G  | GBPC1506     |
| GBPC2506-G  | GBPC2506     |
| GBPC3506-G  | GBPC3506     |
| GBPC5006-G  | GBPC5006     |
| GBPC1508-G  | GBPC1508     |
| GBPC2508-G  | GBPC2508     |
| GBPC3508-G  | GBPC3508     |
| GBPC5008-G  | GBPC5008     |
| GBPC1510-G  | GBPC1510     |
| GBPC2510-G  | GBPC2510     |
| GBPC3510-G  | GBPC3510     |
| GBPC5010-G  | GBPC5010     |



XXXXXX / XXXX = Product type marking code

☐ = Compchip Logo

## Standard Package

| Case Type | BULK PACK     |                      |                  |
|-----------|---------------|----------------------|------------------|
|           | Box<br>( EA ) | Box / Carton<br>(EA) | CARTON<br>( EA ) |
| GBPC      | 50            | 10                   | 500              |