

# GBPC15005-G Thru. GBPC5010-G Series

Reverse Voltage: 50 to 1000V

Forward Current: 15/25/35/50A

RoHS Device

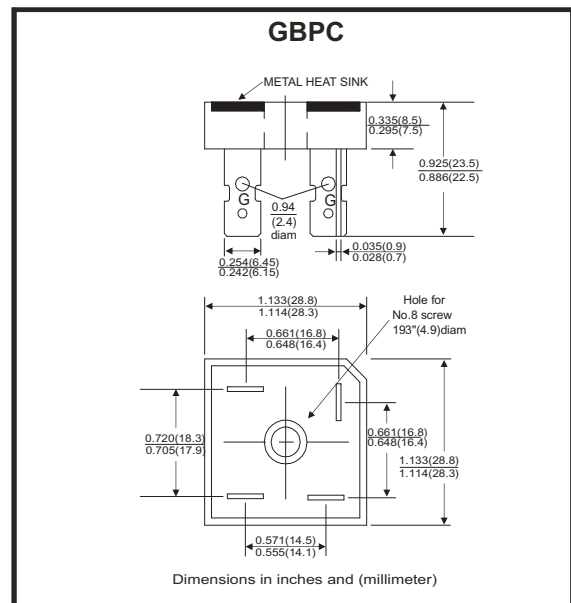


## Features

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

## Mechanical Data

- Polarity: 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 <sub>RRM</sub> | 50     | 100    | 200    | 400    | 600    | 800    | 1000   | V    |
| Maximum RMS Bridge Input Voltage        | V <sub>RRM</sub> | 35     | 70     | 140    | 280    | 420    | 560    | 700    | V    |
| Maximum DC Blocking Voltage             | V <sub>DC</sub>  | 50     | 100    | 200    | 400    | 600    | 800    | 1000   | V    |

| Parameter                                                                              | Symbol           | GBPC15      | GBPC25 | GBPC35 | GBPC50 | Unit |
|----------------------------------------------------------------------------------------|------------------|-------------|--------|--------|--------|------|
| Maximum Average Forward Rectified Output Current @Tc=55°C                              | I <sub>AV</sub>  | 15          | 25     | 35     | 50     | A    |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load    | I <sub>FSM</sub> | 300         | 350    | 400    | 450    | A    |
| Maximum Forward Voltage Drop Per Element at 7.5/12.5/17.5/25.0A Peak                   | V <sub>F</sub>   | 1.1         |        |        |        | V    |
| Maximum Reverse Current at rate DC Blocking Voltage Per Element @ T <sub>J</sub> =25°C | I <sub>R</sub>   | 10.0        |        |        |        | μA   |
| Operating Temperature Range                                                            | T <sub>J</sub>   | -55 to +150 |        |        |        | °C   |
| Storage Temperature Range                                                              | T <sub>STG</sub> | -55 to +150 |        |        |        | °C   |

Fig.1 - De-rating Current Output Rectified Current

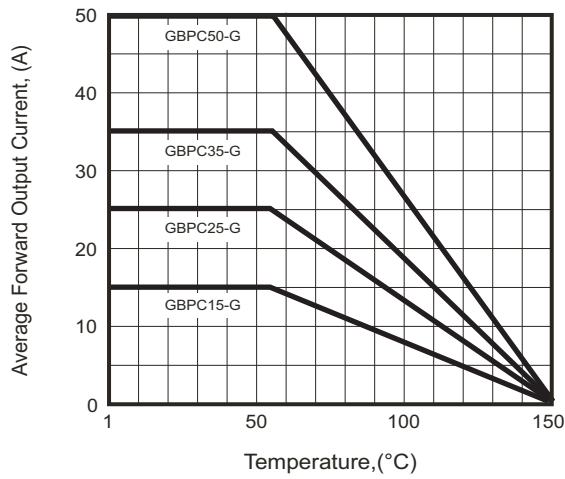


Fig.2 - Typical Forward Characteristics

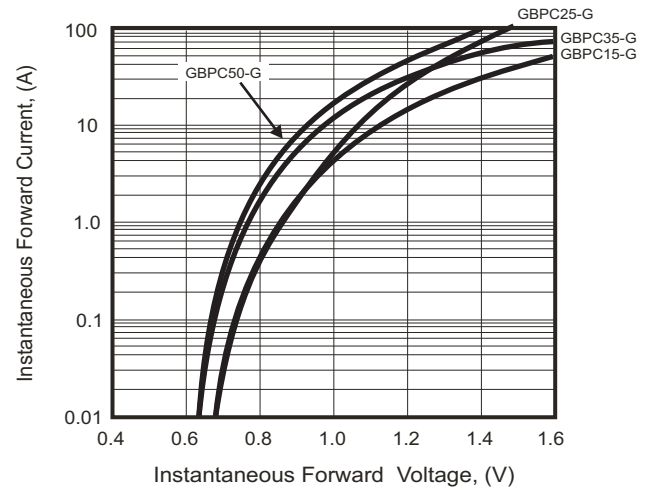


Fig.3 - Maximum Forward Surge Current

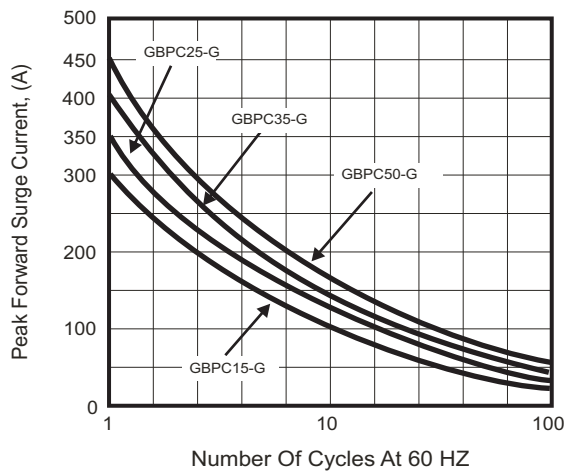
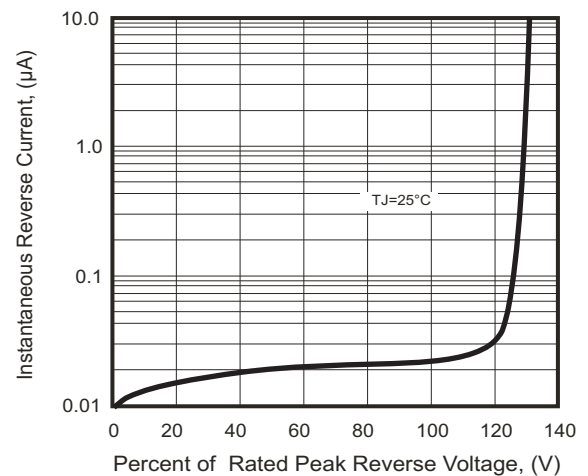
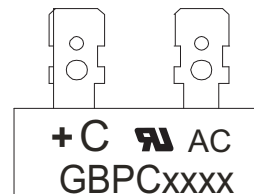


Fig.4 - Typical Reverse Characteristics



## 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  
C = Compchip Logo

## Standard Packaging

| Case Type | BULK PACK      |                   |
|-----------|----------------|-------------------|
|           | BOX<br>( pcs ) | CARTON<br>( pcs ) |
| GBPC      | 50             | 500               |

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Authorized Distributor

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[GBPC3501-G](#) [GBPC5002-G](#) [GBPC2504-G](#) [GBPC3504-G](#) [GBPC2501-G](#) [GBPC2510-G](#) [GBPC2508-G](#) [GBPC25005-](#)  
[G](#) [GBPC5001-G](#) [GBPC35005-G](#) [GBPC2506-G](#) [GBPC5004-G](#) [GBPC50005-G](#) [GBPC2502-G](#) [GBPC3502-G](#)