

# 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.
- Solderable 0.25" Fast ON terminals.
- UL recognized file # E349301 

## Mechanical Data

- Polarity: As marked on Body.
- Mounting position: Any.
- Weight: 16.57 grams (approx.).



## 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 Recurrent Peak Reverse 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 @Tc=55°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 @ Tj=25°C            | $I_R$     | 10.0        |        |        |        | μA   |
| Operating Temperature Range                                                          | $T_J$     | -55 to +150 |        |        |        | °C   |
| Storage Temperature Range                                                            | $T_{STG}$ | -55 to +150 |        |        |        | °C   |

Company reserves the right to improve product design , functions and reliability without notice.

REV: C

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

Fig.1 - Derating Curve 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 = Comchip Logo**

## Standard Packaging

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

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