

# GBPC15005W-G Thru. GBPC5010W-G Series

Reverse Voltage: 50 to 1000V

Forward Current: 15/25/35/50A

RoHS Device

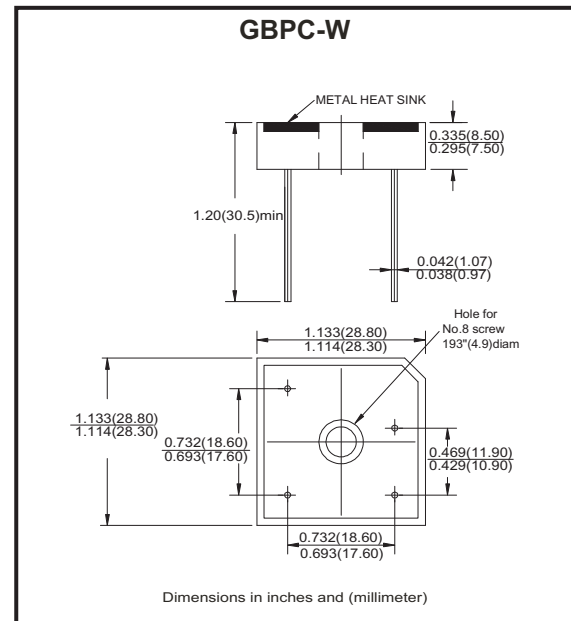


## Features

- Surge overload -300~450 Amperes peak.
- Low forward voltage drop.
- Electrically isolated base -2000 Volts.
- Materials used carries UL recognition.
- UL recognized file # E349301 

## Mechanical Data

- Polarity: As marked on Body.
- Mounting position: Any.
- Weight: 11.92 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_W-G | GBPC_W-G | GBPC_W-G | GBPC_W-G | GBPC_W-G | GBPC_W-G | GBPC_W-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       | $V_{RMS}$ | 35       | 70       | 140      | 280      | 420      | 560      | 700      | V    |
| Maximum DC Blocking Voltage            | $V_{DC}$  | 50       | 100      | 200      | 400      | 600      | 800      | 1000     | V    |

| Parameter                                                                                 | Symbol     | GBPC15W     | GBPC25W | GBPC35W | GBPC50W | 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 rated 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 |         |         |         | $^\circ\text{C}$ |

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

REV: D

## Rating and Characteristics Curves (GBPC10005W-G Thru. GBPC5010W-G Series)

Fig.1 - Maximum Forward Surge Current



Fig.2 - Dearting Current Output Rectified Current

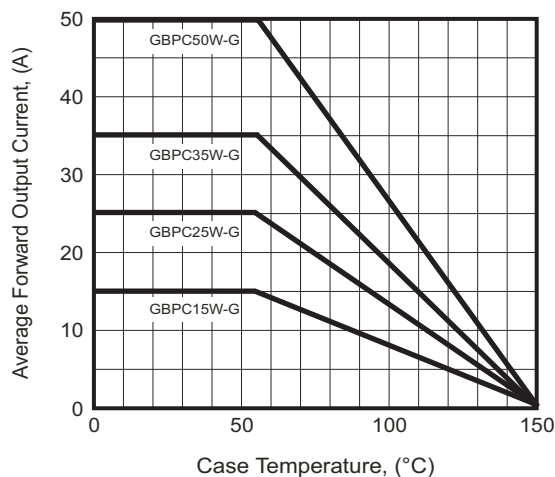


Fig.3 - Typical Forward Characteristics



Fig.4 - Typical Reverse Characteristics



## Marking Code

| Part Number  | Marking code |
|--------------|--------------|
| GBPC15005W-G | GBPC15005W   |
| GBPC25005W-G | GBPC25005W   |
| GBPC35005W-G | GBPC35005W   |
| GBPC50005W-G | GBPC50005W   |
| GBPC1501W-G  | GBPC1501W    |
| GBPC2501W-G  | GBPC2501W    |
| GBPC3501W-G  | GBPC3501W    |
| GBPC5001W-G  | GBPC5001W    |
| GBPC1502W-G  | GBPC1502W    |
| GBPC2502W-G  | GBPC2502W    |
| GBPC3502W-G  | GBPC3502W    |
| GBPC5002W-G  | GBPC5002W    |
| GBPC1504W-G  | GBPC1504W    |
| GBPC2504W-G  | GBPC2504W    |
| GBPC3504W-G  | GBPC3504W    |
| GBPC5004W-G  | GBPC5004W    |
| GBPC1506W-G  | GBPC1506W    |
| GBPC2506W-G  | GBPC2506W    |
| GBPC3506W-G  | GBPC3506W    |
| GBPC5006W-G  | GBPC5006W    |
| GBPC1508W-G  | GBPC1508W    |
| GBPC2508W-G  | GBPC2508W    |
| GBPC3508W-G  | GBPC3508W    |
| GBPC5008W-G  | GBPC5008W    |
| GBPC1510W-G  | GBPC1510W    |
| GBPC2510W-G  | GBPC2510W    |
| GBPC3510W-G  | GBPC3510W    |
| GBPC5010W-G  | GBPC5010W    |



XXXXX / XXXX = Product type marking code

**C** = Comchip Logo

## Standard Packaging

| Case Type | TRAY PACK       |                   |
|-----------|-----------------|-------------------|
|           | TRAY<br>( pcs ) | CARTON<br>( pcs ) |
| GBPC-W    | 100             | 500               |