

GBPC15005W-G Thru. GBPC5010W-G Series

Reverse Voltage: 50 to 1000V

Forward Current: 15/25/35/50A

RoHS Device

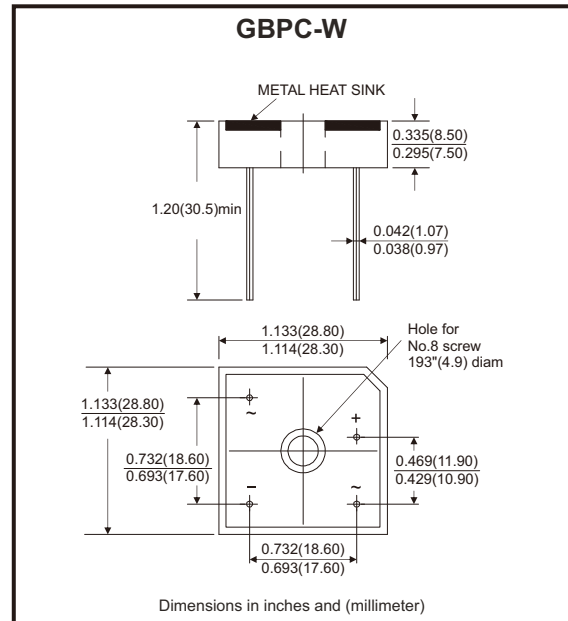


Features

- 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 superimposed on rated load | I_{FSM} | 300 | 350 | 400 | 450 | A |
| Maximum forward voltage drop per element at 7.5/12.5/17.5/25A 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 | | | | μA |
| 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:E

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

Fig.1 - Maximum Forward Surge Current

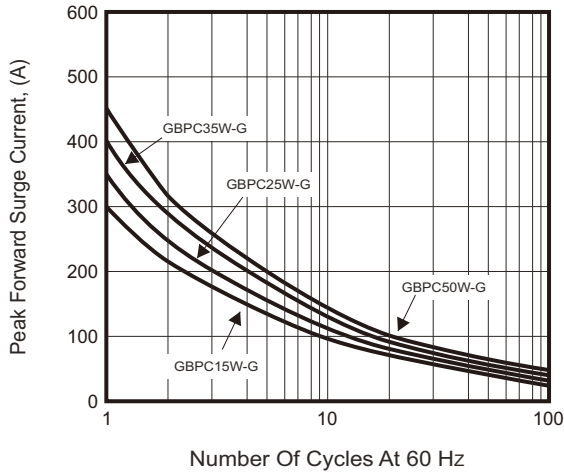


Fig.2 - Dearing Current Output Rectified Current

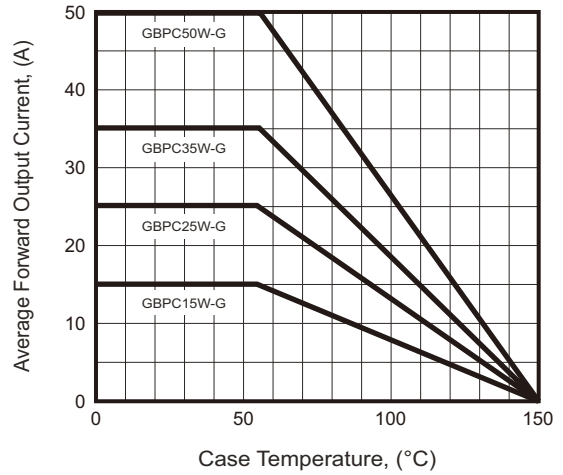


Fig.3 - Typical Forward Characteristics

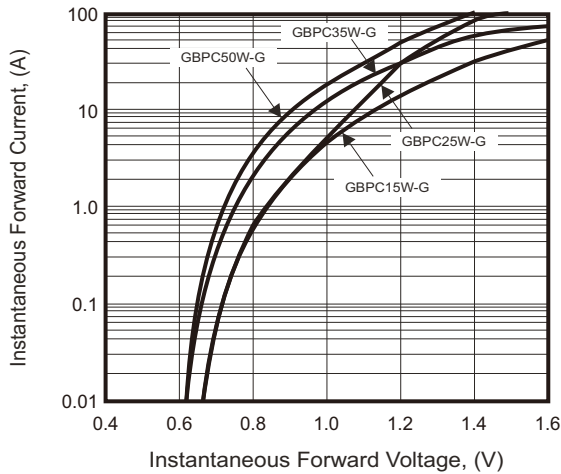
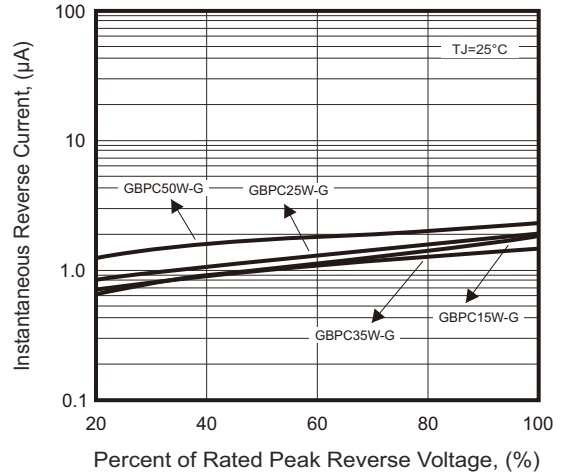
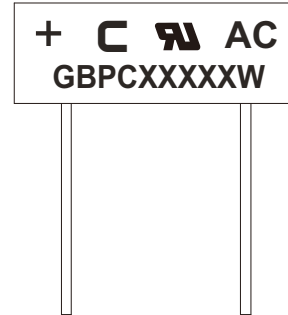


Fig.4 - Typical Reverse Characteristics



Marking Code

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



XXXXX / XXXX = Product type marking code

C = Comchip Logo

Standard Packaging

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