

GBPC15005-G Thru. GBPC5010-G Series

Reverse Voltage: 50 to 1000V

Forward Current: 15/25/35/50A

RoHS Device

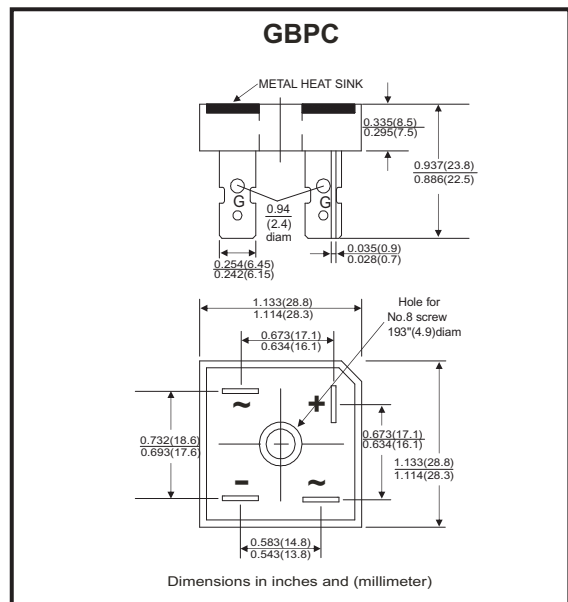


Features

- 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 | |
| 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 @ $T_c=55^\circ C$ | $I_{(AV)}$ | 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 @ $T_J=25^\circ C$ | I_R | 10.0 | | | | μA |
| Operating Temperature Range | T_J | -55 to +150 | | | | $^\circ C$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | $^\circ C$ |

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

REV: C

Rating and Characteristics Curves (GBPC1005-G Thru. GBPC5010-G Series)

Fig.1 - Derating Curve Output Rectified Current

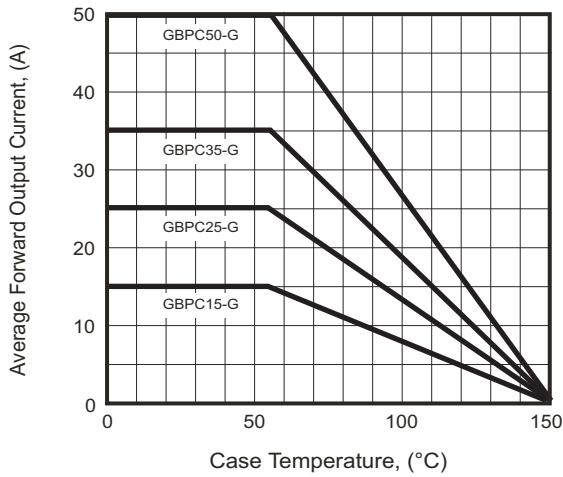


Fig.2 - Typical Forward Characteristics

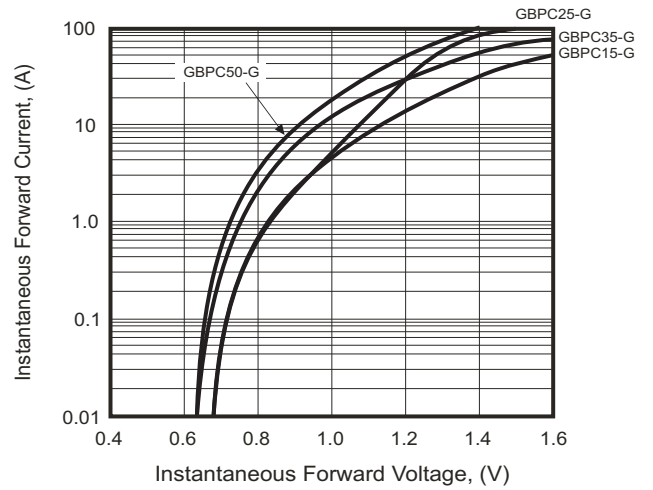


Fig.3 - Maximum Forward Surge Current

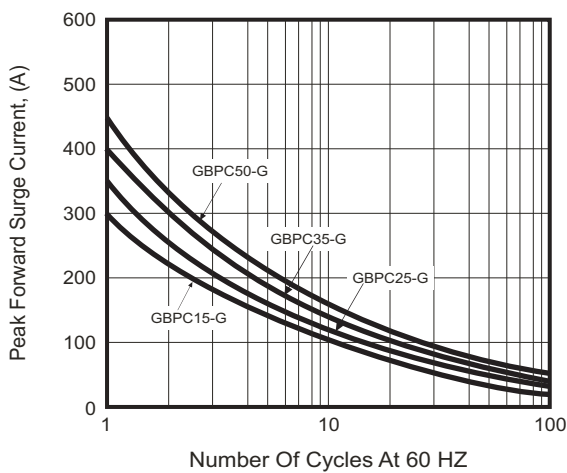
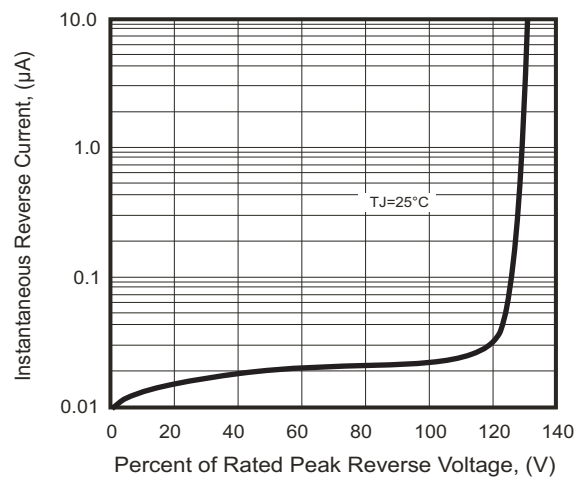
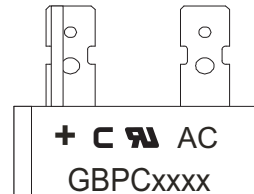


Fig.4 - Typical Reverse Characteristics



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 |



XXXXX / XXXX = Product type marking code
C = Comchip Logo

Standard Packaging

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