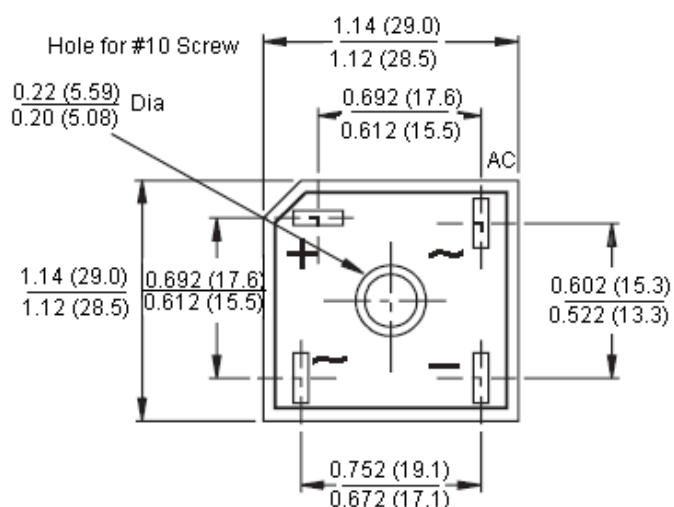




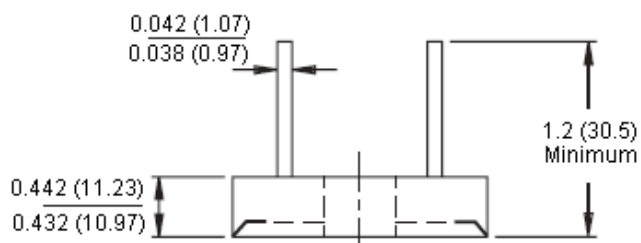
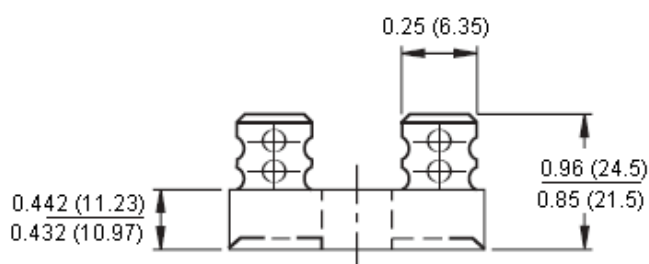
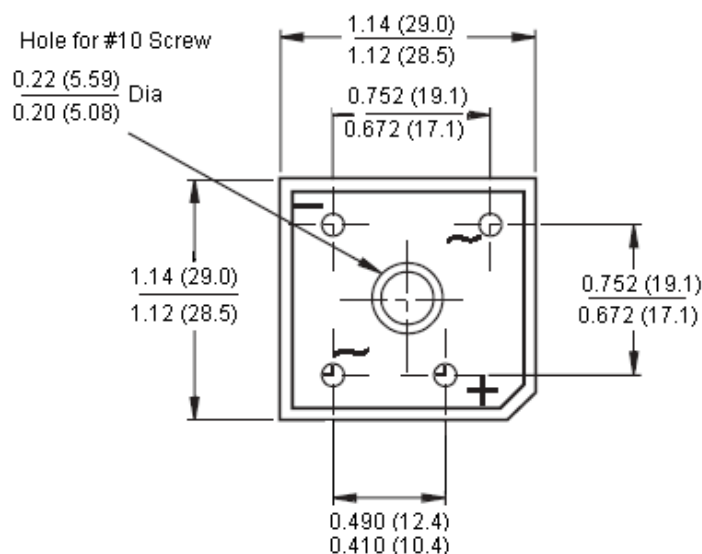
## Features:

- Plastic material.
- Integrally moulded heatsink provide very low thermal resistance for maximum heat dissipation.
- Surge overload ratings from 300 to 400 amperes.
- Terminals solderable per MIL-STD-202, method 208 (for wire type).
- Typical  $I_R$  less than  $0.2 \mu A$ .
- High temperature soldering guaranteed:  $260^\circ C/10$  seconds 0.375 inches (9.5mm) lead lengths (for wire type).
- Isolated voltage from case to lead over 2500 volts.

**GBPC**



**GBPC-W**



Dimensions : Inches (Millimetres)

# GBPC15,25,35- Series



## 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%.

| Type Number                                                                            | Symbol                                                            | -005                 | -01 | -02 | -04 | -06 | -08 | -10  | Units |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|----------------------|-----|-----|-----|-----|-----|------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                 | V <sub>RRM</sub>                                                  | 50                   | 100 | 200 | 400 | 600 | 800 | 1000 | V     |
| Maximum RMS Voltage                                                                    | V <sub>RMS</sub>                                                  | 35                   | 70  | 140 | 280 | 420 | 560 | 700  |       |
| Maximum DC Blocking Voltage                                                            | V <sub>DC</sub>                                                   | 50                   | 100 | 200 | 400 | 600 | 800 | 1000 |       |
| Maximum Average Forward Rectified Current at T <sub>c</sub> = 55°C                     | GBPC15<br>GBPC25<br>GBPC35<br><br>I <sub>(AV)</sub>               | 15.0<br>25.0<br>35.0 |     |     |     |     |     |      | A     |
| Peak Forward Surge Current, Single Sine-wave Superimposed on Rated Load (JEDEC method) | GBPC15<br>GBPC25<br>GBPC35<br><br>I <sub>FSM</sub>                | 300<br>300<br>400    |     |     |     |     |     |      |       |
| Maximum Instantaneous Forward Voltage Drop Per Element at Specified Current            | GBPC15 7.5A<br>GBPC25 12.5A<br>GBPC35 17.5A<br><br>V <sub>F</sub> | 1.1                  |     |     |     |     |     |      | V     |
| Maximum DC Reverse Current at Rated DC Blocking Voltage per Element                    | I <sub>R</sub>                                                    | 5                    |     |     |     |     |     |      | mA    |
| Typical Thermal Resistance (Note 1)                                                    | R <sub>θJC</sub>                                                  | 1.5                  |     |     |     |     |     |      | °C/W  |
| Operating and Storage Temperature Range                                                | T <sub>J</sub> , T <sub>STG</sub>                                 | -50 to +150          |     |     |     |     |     |      | °C    |

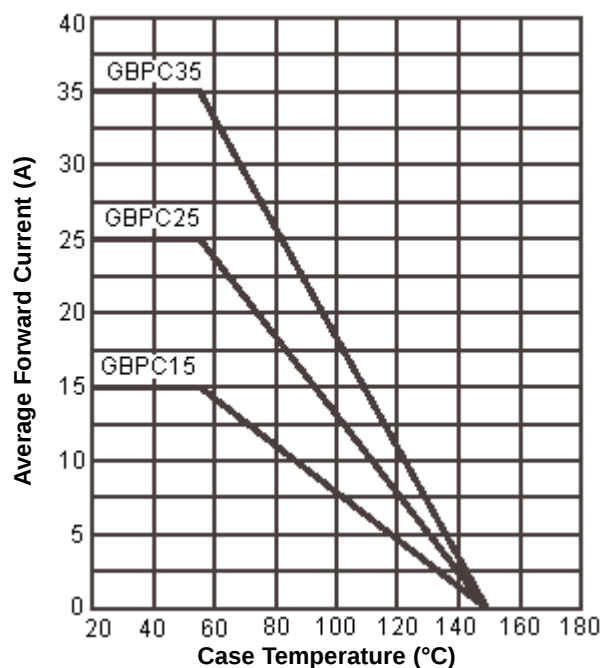
- Notes:** 1. Thermal Resistance from Junction to Case.  
2. Suffix "W" - Wire Lead Structure.

# GBPC15,25,35- Series

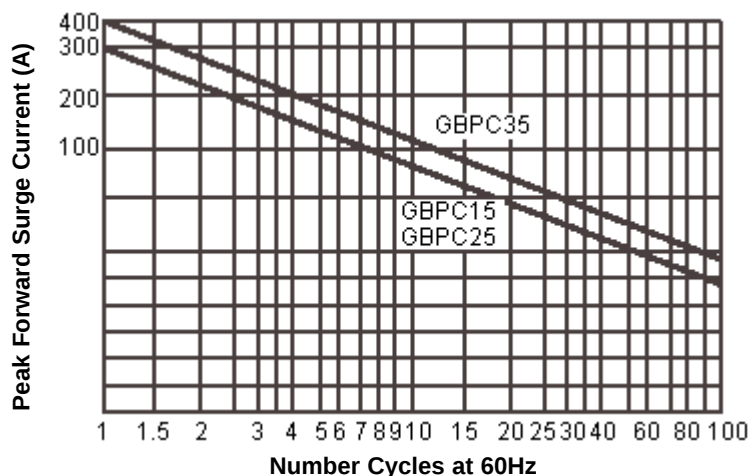


Ratings and Characteristic Curves (GBPC15005 thru GBPC1510, GBPC25005 thru GBPC2510, GBPC35005 thru GBPC3510)

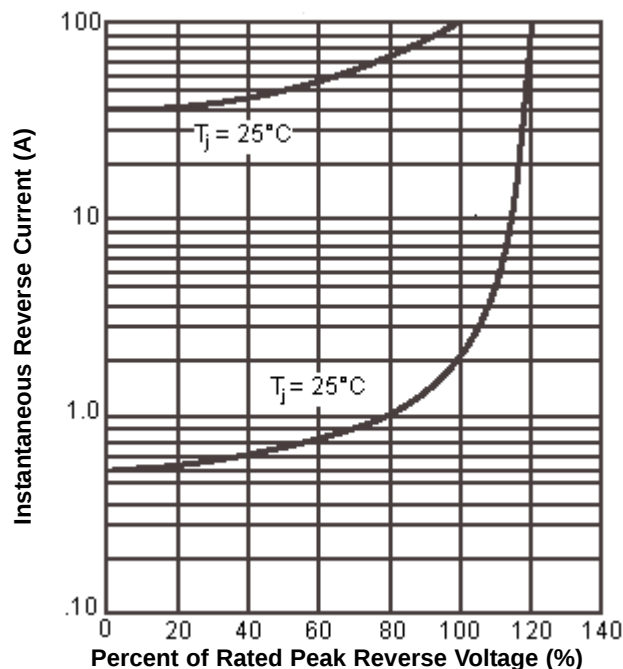
Maximum Forward Current Derating Curve



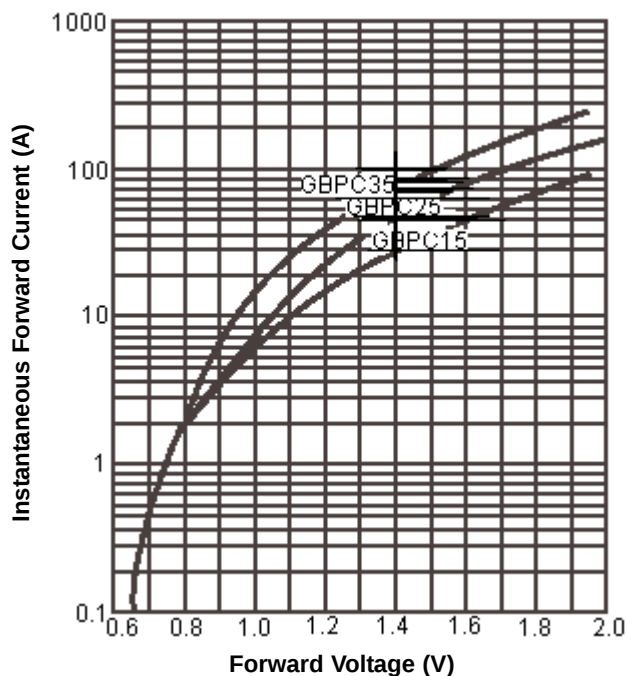
Maximum Non-Repetitive Forward Surge Current Per Bridge Element



Typical Reverse Characteristics Per Bridge Element



Typical Forward Characteristics Per Bridge Element



## Part Number Table

| Description                  | Part Number |
|------------------------------|-------------|
| Bridge Rectifier, 15A, 50V   | GBPC15005   |
| Bridge Rectifier, 15A, 50V   | GBPC15005W  |
| Bridge Rectifier, 15A, 100V  | GBPC1501    |
| Bridge Rectifier, 15A, 100V  | GBPC1501W   |
| Bridge Rectifier, 15A, 200V  | GBPC1502    |
| Bridge Rectifier, 15A, 200V  | GBPC1502W   |
| Bridge Rectifier, 15A, 400V  | GBPC1504    |
| Bridge Rectifier, 15A, 400V  | GBPC1504W   |
| Bridge Rectifier, 15A, 600V  | GBPC1506    |
| Bridge Rectifier, 15A, 600V  | GBPC1506W   |
| Bridge Rectifier, 15A, 800V  | GBPC1508    |
| Bridge Rectifier, 15A, 800V  | GBPC1508W   |
| Bridge Rectifier, 15A, 1000V | GBPC1510    |
| Bridge Rectifier, 15A, 1000V | GBPC1510W   |
| Bridge Rectifier, 25A, 50V   | GBPC25005W  |
| Bridge Rectifier, 25A, 100V  | GBPC2501W   |
| Bridge Rectifier, 25A, 200V  | GBPC2502W   |
| Bridge Rectifier, 25A, 400V  | GBPC2504W   |
| Bridge Rectifier, 25A, 600V  | GBPC2506W   |
| Bridge Rectifier, 25A, 800V  | GBPC2508W   |
| Bridge Rectifier, 25A, 1000V | GBPC2510    |
| Bridge Rectifier, 25A, 1000V | GBPC2510W   |
| Bridge Rectifier, 35A, 50V   | GBPC35005B0 |
| Bridge Rectifier, 35A, 50V   | GBPC35005W  |
| Bridge Rectifier, 35A, 100V  | GBPC3501    |
| Bridge Rectifier, 35A, 100V  | GBPC3501W   |

# GBPC15,25,35- Series



## Part Number Table

| Description                  | Part Number |
|------------------------------|-------------|
| Bridge Rectifier, 35A, 200V  | GBPC3502W   |
| Bridge Rectifier, 35A, 400V  | GBPC3504    |
| Bridge Rectifier, 35A, 400V  | GBPC3504W   |
| Bridge Rectifier, 35A, 600V  | GBPC3506    |
| Bridge Rectifier, 35A, 600V  | GBPC3506W   |
| Bridge Rectifier, 35A, 800V  | GBPC3508    |
| Bridge Rectifier, 35A, 800V  | GBPC3508W   |
| Bridge Rectifier, 35A, 1000V | GBPC3510    |
| Bridge Rectifier, 35A, 1000V | GBPC3510W   |

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