



# GBPC 15, 25, 35 SERIES

High Current 15, 25, 35 AMPS. Single Phase Glass Passivated Bridge Rectifiers

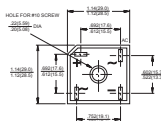


Voltage Range  
50 to 1000 Volts  
Current  
15.0/25.0/35.0 Amperes

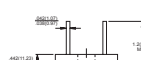
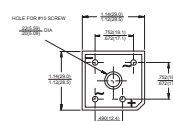
## Features

- ✧ UL Recognized file # E-96005
- ✧ The plastic material used carries Underwriters Laboratory Flammability Recognition 94V-0
- ✧ Integrally molded heatsink provide very low thermal resistance for maximum heat dissipation
- ✧ Surge overload ratings from 300 amperes 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°C / 10 seconds / .375", (9.5mm) lead lengths (For wire type)
- ✧ Isolated voltage from case to lead over 2500 volts

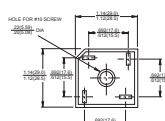
### GBPC



### GBPC-W



### GBPC-M



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, 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                                                        | $V_{RRM}$       | 50                   | 100 | 200 | 400 | 600 | 800 | 1000 | V            |
| Maximum RMS 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            |
| Maximum Average Forward Rectified Current<br>@ $T_c = 55^\circ C$                             | $I_{(AV)}$      | 15.0<br>25.0<br>35.0 |     |     |     |     |     |      | A            |
| Peak Forward Surge Current,<br>Single Sine-wave Superimposed<br>on Rated Load (JEDEC method ) | $I_{FSM}$       | 300<br>300<br>400    |     |     |     |     |     |      | A            |
| Maximum Instantaneous Forward Voltage Drop Per Element at Specified Current                   | $V_F$           | 1.1                  |     |     |     |     |     |      | V            |
| Maximum DC Reverse Current at Rated DC Blocking Voltage Per Element                           | $I_R$           | 5                    |     |     |     |     |     |      | $\mu A$      |
| Typical Thermal Resistance (Note 1)                                                           | $R_{\theta JC}$ | 1.5                  |     |     |     |     |     |      | $^\circ C/W$ |
| Operating and Storage Temperature Range                                                       | $T_J, T_{STG}$  | -50 to +150          |     |     |     |     |     |      | $^\circ C$   |

Notes: 1. Thermal Resistance from Junction to Case.

2. Suffix "W" - Wire Lead Structure/"M" - Terminal Location Face to Face.

GBPC15005      GBPC1510  
 RATINGS AND CHARACTERISTIC CURVES (GBPC25005 THRU GBPC2510)  
 GBPC35005      GBPC3510

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

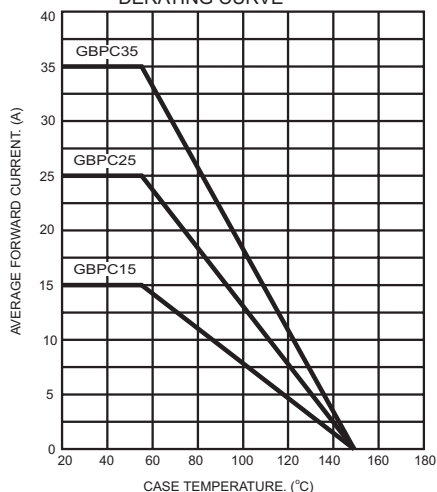


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

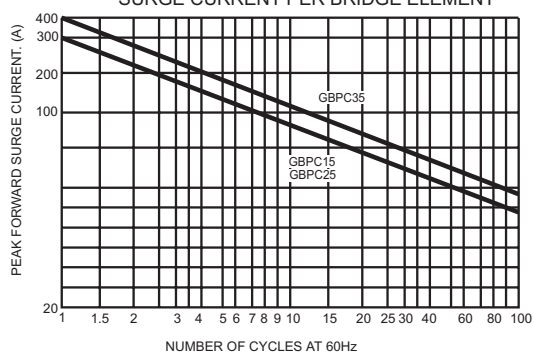


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

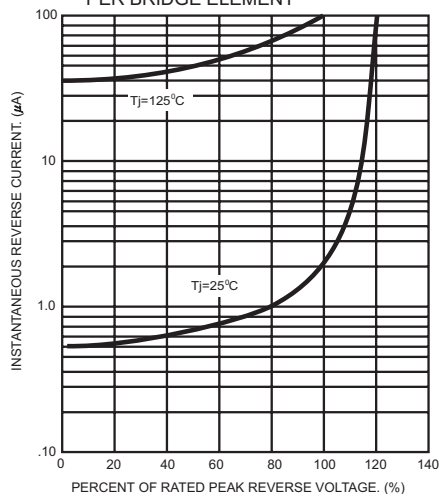


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

