

# GBPC 15, 25, 35 SERIES

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



## Features

- ◇ UL Recognized file # E-326243
- ◇ 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
- ◇ Typical  $I_R$  less than 0.2 uA
- ◇ 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

## Mechanical Data

- ◇ Case: Molded plastic body.
- ◇ Terminals: Pure tin plated, Lead free. leads solderable per MIL-STD-202, Method 208
- ◇ Weight:16.95 grams
- ◇ Mounting Torque: 20 inches-lbs. max.

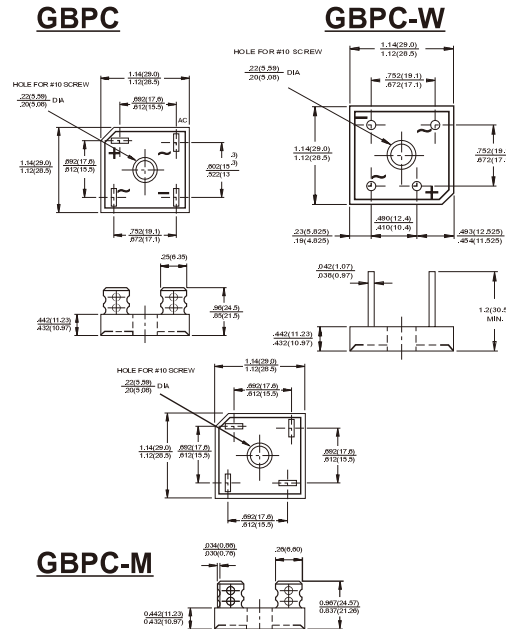
## Maximum Ratings and Electrical Characteristics

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>@ $T_c=55^\circ C$                               | $I_F(AV)$       |      |     |     | 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 (Note 1)                  | $I_R$           |      |     |     | 5                    |     |     |      | uA    |
| Typical Thermal Resistance  | $R_{\theta JC}$ |      |     |     | 1.5                  |     |     |      | °C/W  |
| Operating and Storage Temperature Range   | $T_J, T_{STG}$  |      |     |     | -50 to +150          |     |     |      | °C    |

Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle  
2. Suffix "W" - Wire Lead Structure/"M" - Terminal Location Face to Face.

Version: G10



Dimensions in inches and (millimeters)

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

