WEE Technology Company Limited

Single Phase Bridge Rectifiers

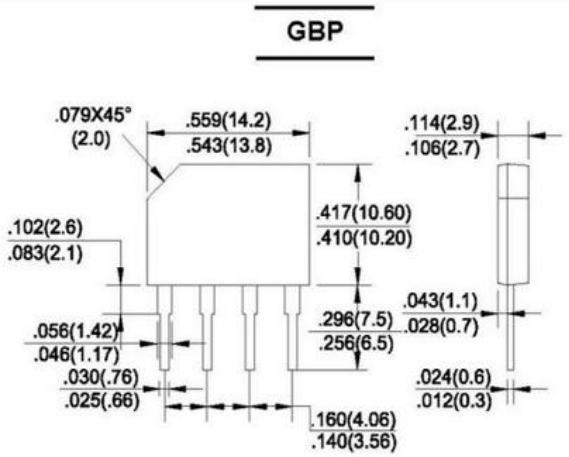
# GBP2005 THRU GBP210

**VOLTAGE RANGE** 50 to 1000 Volts

**CURRENT** 2.0 Ampere

## Features

- Glass passivated chip junction
- Ideal for surface mounted applications
- Low leakage
- High forward surge current capability
- High temperature soldering guaranteed: 260℃/10 seconds at terminals




Dimensions in inches and (milimeters)

## Mechanical Data

- Case: Molded plastic body
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Molded on body
- LeadP: Plated terminals solderable per MIL-STD-202E method 208C
- Weight: 0.039 ounce, 1.1gram

## Maximum Ratings and Electrical Characteristics

- Ratings at 25℃ ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

| TYPE NUMBER | | SYMBOLS | GBP 2005 | GBP 201 | GBP 202 | GBP 204 | GBP 206 | GBP 208 | GBP 210 | UNIT |
|---|---|---|---|---|---|---|---|---|---|---|
| Maximum Reverse Peak Repetitive Voltage | | $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Voltage | | $V_{RMS}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | | $V_{DC}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Rectified Output Current, 0.06"(1.5mm) lead length at $T_C$=100℃ | | $I_{(AV)}$ | 2.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC Method) | | $I_{FSM}$ | 60 | | | | | | | Amps |
| Rating for Fusing (t<8.3ms) | | $I^2t$ | 15 | | | | | | | $A^2s$ |
| Maximum Instantaneous Forward Voltage drop Per Bridge element 2.0A | | $V_F$ | 1.1 | | | | | | | Volts |
| Maximum Reverse Current at rated DC blocking voltage per element | $T_A$=25℃ | $I_R$ | 10 | | | | | | | μAmps |
| | $T_A$=100℃ | | 50 | | | | | | | |
| Typical Thermal Resistance (NOTE 2) | | $R_{\Theta JC}$ | 6 | | | | | | | ℃/W |
| | | $R_{\Theta JL}$ | 5 | | | | | | | ℃/W |
| | | $R_{\Theta JA}$ | 42 | | | | | | | ℃/W |
| Operating and Storage Temperature Range | | $T_J$ ,$T_{STG}$ | (-55 to +150) | | | | | | | ℃ |

**Notes:**

1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on P.C.B. with 0.033"×0.043"(1.00mm×1.30mm) copper pads.



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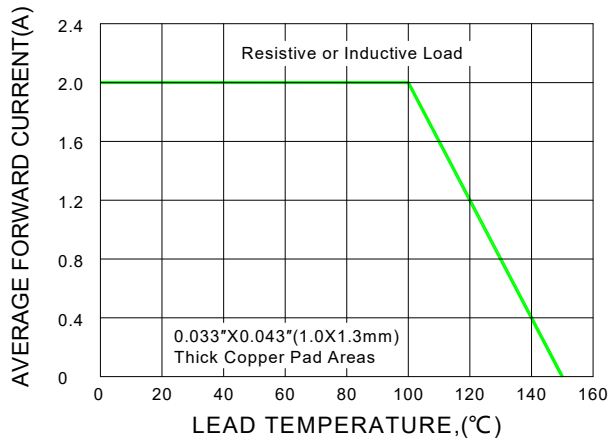
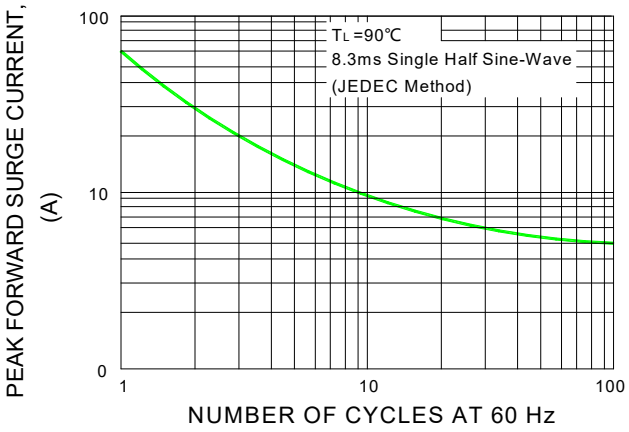
**CURRENT** 2.0 Ampere

## Ratings and Characteristic Curves (TA=25℃ unless otherwise noted)

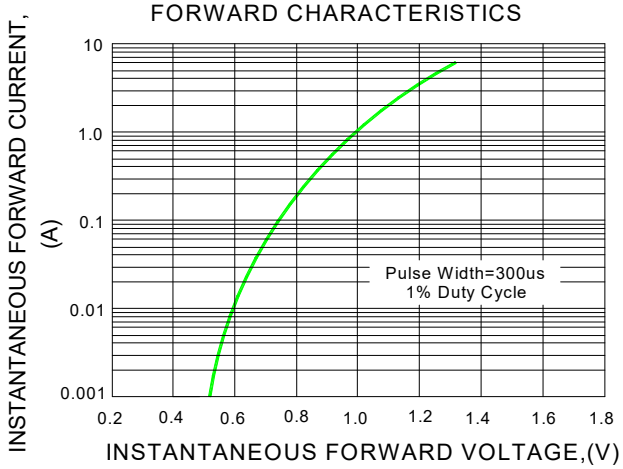
F1G.1-FORWARD CURRENT DERATING CURVE



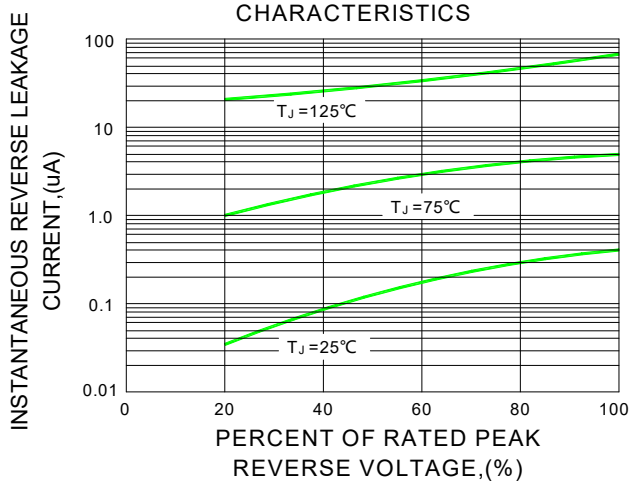

F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



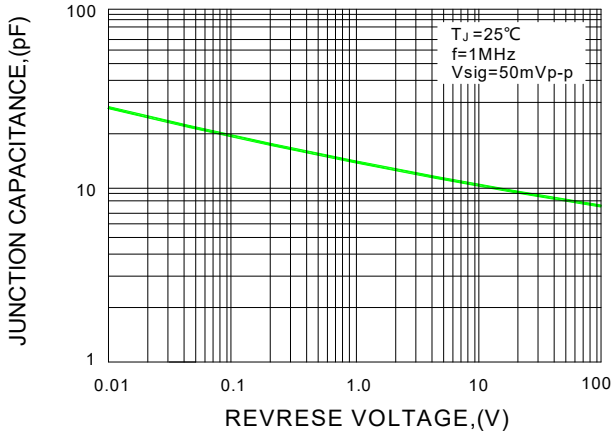

F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS




F1G.4-TYPICAL REVERSE CHARACTERISTICS




F1G.5-TYPICAL JUNCTION CAPACITANCE




Note: Specifications are subject to change without notice. For more detail and update, please visit our website.