

# GBP3005~GBP310

## BRIDGE RECTIFIERS

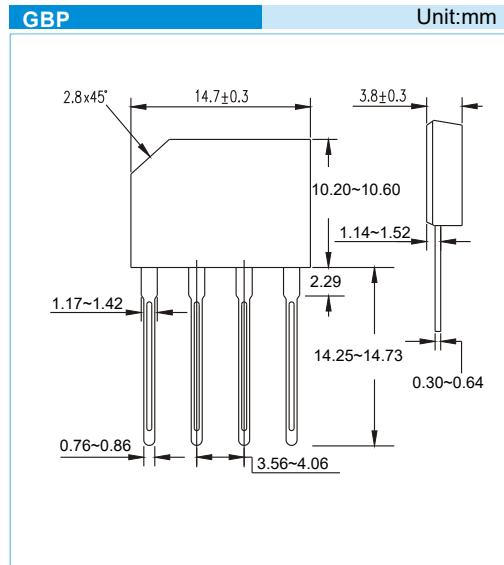
**VOLTAGE** 50 to 1000 Volt **CURRENT** 3 Ampere

### FEATURES

- High forward surge current capability
- Low reverse leakage
- High reliability
- Lead free in compliance with EU RoHS

### MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

| PARAMETER                                                                           | SYMBOL          | GBP3005     | GBP301 | GBP302 | GBP304 | GBP306 | GBP308 | GBP310 | 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 Current (see FIG.1)                                         | $I_{F(AV)}$     | 3           |        |        |        |        |        |        | A             |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load | $I_{FSM}$       | 80          |        |        |        |        |        |        | A             |
| Maximum Forward Voltage at 1.5 A                                                    | $V_F$           | 1.10        |        |        |        |        |        |        | V             |
| Maximum DC Reverse Current at<br>Rated DC Blocking Voltage                          | $I_R$           | 10<br>1     |        |        |        |        |        |        | $\mu A$<br>mA |
| Thermal Resistance                                                                  | $R_{\theta JA}$ | 30          |        |        |        |        |        |        | °C / W        |
| Operating Junction Temperature Range                                                | $T_J$           | -55 to +150 |        |        |        |        |        |        | °C            |
| Storage Temperature Range                                                           | $T_{STG}$       | -55 to +150 |        |        |        |        |        |        | °C            |

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## RATING AND CHARACTERISTIC CURVES

Fig. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

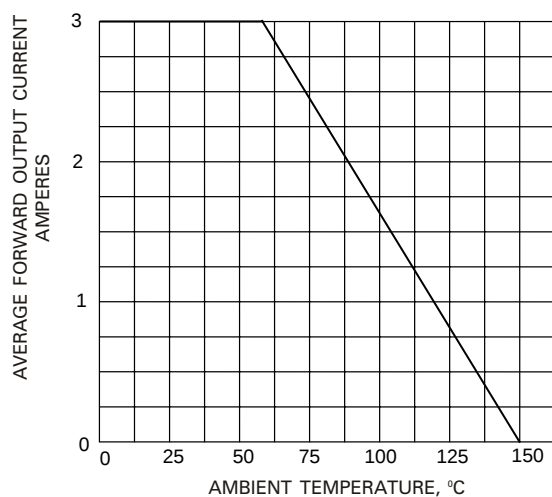


Fig. 2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

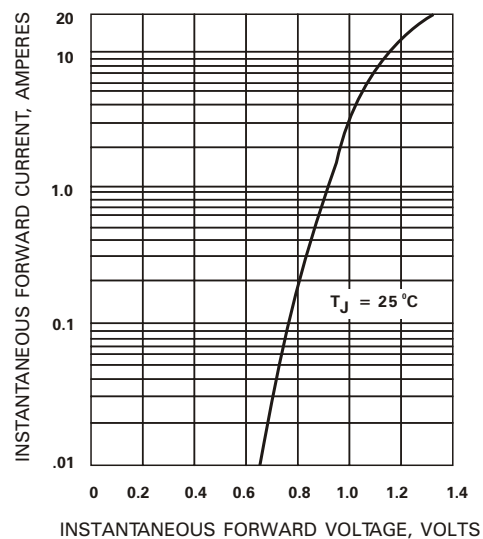


Fig. 3 - TYPICAL FORWARD CHARACTERISTICS

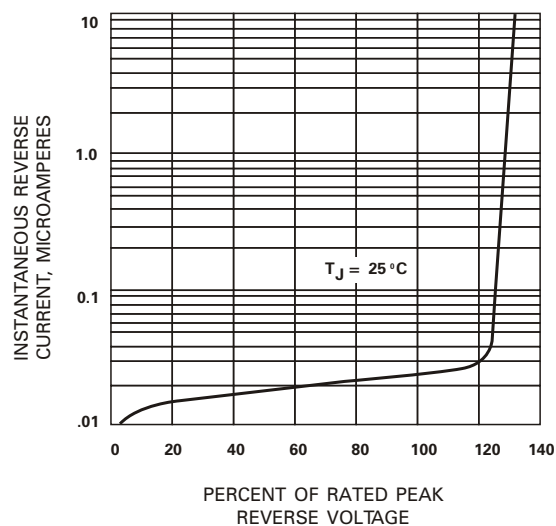
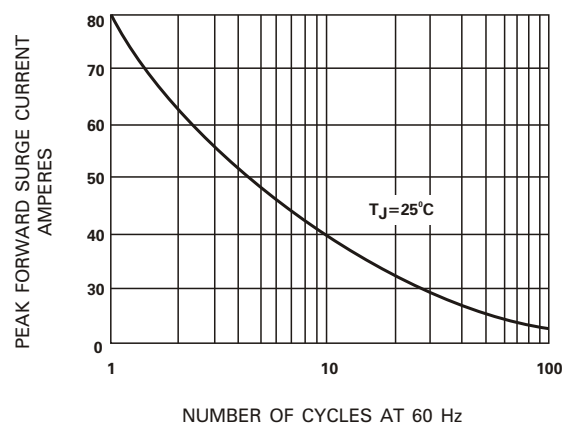


Fig. 4 - MAXIMUM FORWARD SURGE CURRENT



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### ORDER INFORMATION

- Packing information

| Part Number    | Case | DELIVERY MODE | QUANTITY |
|----------------|------|---------------|----------|
| GBP3005~GBP310 | GBP  | BULK          | 5000/Ctn |