# Glass Passivated Bridge Rectifier

| Voltage | 1000 V | Current | 8A |
|---|---|---|---|

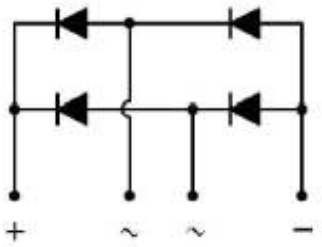
## GBL-2


### Features

- Ideal for printed circuit boards
- UL recognition file number E526209
- Lead free in compliance with EU RoHS 2.0
- Halogen-free according to IEC 61249 standard

### Mechanical Data

- Case : GBL-2 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 2.1759 grams




### Application

- Computing Power / Consumer Power
- Game Console Power
- Monitor Power
- Slim Adapter

| Key Parameters | |
|---|---|
| **Parameter** | **Value** |
| $V_{RRM}$ | 1000V |
| $I_{F}(AV)$ | 8A |
| $I_{FSM}$ | 200A |
| $I_{R}$ | 5uA |
| Package | GBL-2 |

## Maximum Ratings and Thermal Characteristics ($T_A$ = 25 °C unless otherwise noted)

| PARAMETER | | SYMBOL | LIMIT | UNITS |
|---|---|---|---|---|
| Maximum Repetitive Peak Reverse Voltage | | $V_{RRM}$ | 1000 | V |
| Maximum RMS Voltage | | $V_{RMS}$ | 700 | V |
| Maximum DC Blocking Voltage | | $V_{DC}$ | 1000 | V |
| Maximum Average Forward Current | With heatsink | $I_{F(AV)}$ | 8 | A |
| | Without heatsink | | 2.7 | |
| Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load | @ $T_A$ = 25 °C | $I_{FSM}$ | 200 | A |
| | @ $T_A$ = 125 °C | | 160 | |
| Peak Forward Surge Current : 1.0 ms Single Half Square -Wave Superimposed On Rated Load | @ $T_A$ = 25 °C | $I_{FSM}$ | 380 | A |
| | @ TA = 125 °C | | 310 | |
| $I^2t$ rating for fusing ( t = 8.3ms) | | $I^2t$ | 166 | $A^2S$ |
| Typical Junction Capacitance<br>Measured at 1 MHZ And Applied $V_R$ = 4 V | | $C_J$ | 65 | pF |
| Typical Thermal Resistance (Note 1) (with heatsink) | | $R_{\Theta jA}$ | 18 | °C/W |
| | | $R_{\theta JL}$ | 5 | |
| | | $R_{\theta Jc}$ | 7 | |
| Operating Junction Temperature Range | | $T_J$ | -55~150 | °C |
| Storage Temperature Range | | $T_{STG}$ | -55~150 | °C |

## Electrical Characteristics ($T_A$ = 25 °C unless otherwise noted)

| PARAMETER | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNITS |
|---|---|---|---|---|---|---|
| Forward Voltage | $V_F$ | $I_F$ = 4 A, $T_J$ = 25 °C | - | - | 1.05 | V |
| Reverse Current | $I_R$ | $V_R$ = 1000 V, $T_J$ = 25 °C | - | - | 5 | uA |
| | | $V_R$ = 1000 V,$T_J$= 125 °C | - | - | 100 | |

NOTES :

1. Device mounted on 10 cm * 9.4 cm * 2.6 cm Fin type heat sink

## TYPICAL CHARACTERISTIC CURVES

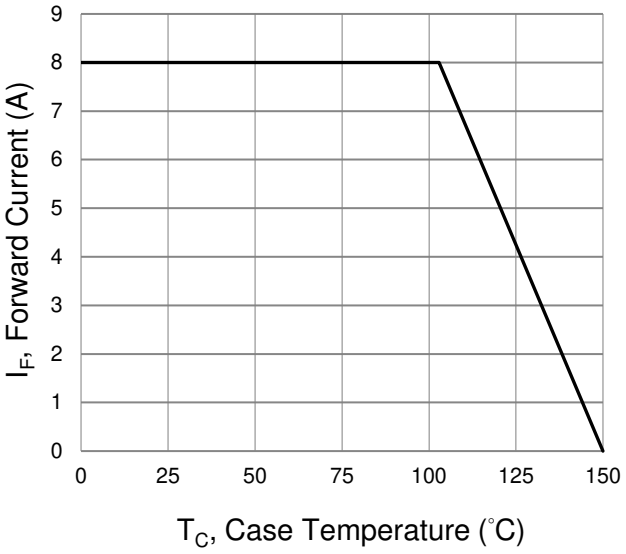



Fig.1 Forward Current Derating Curve

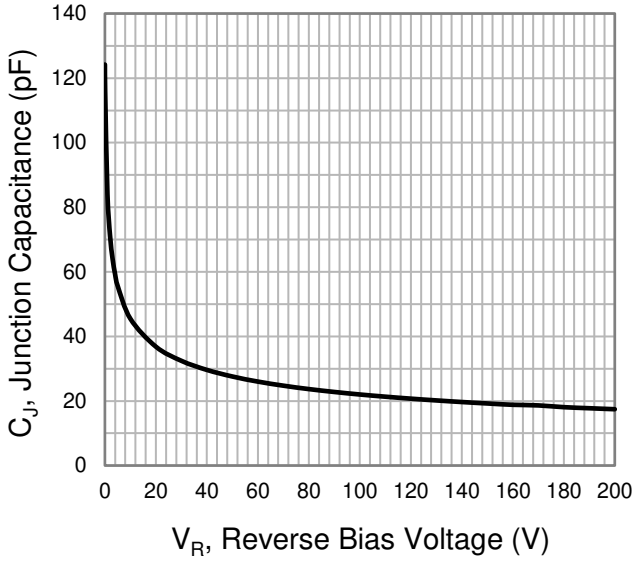



Fig.2 Typical Junction Capacitance

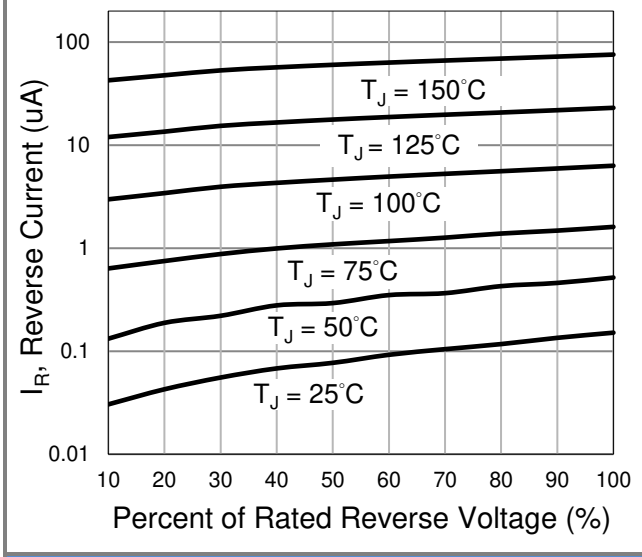



Fig.3 Typical Reverse Characteristics

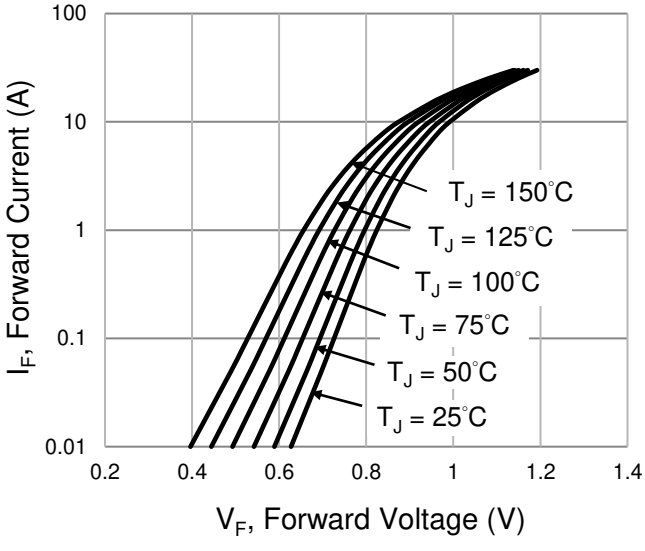


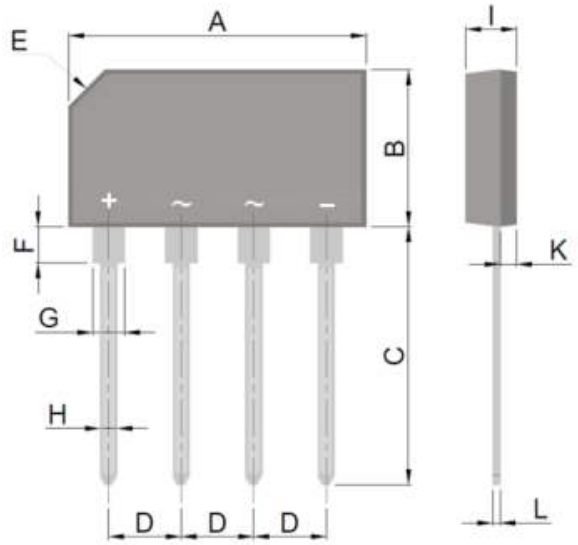

Fig.4 Typical Forward Characteristics

## Part No. Marking Code Version

| Approved Part No. | Package Type | Packing Type | Marking |
|---|---|---|---|
| GBL810 | GBL-2 | 25pcs / Tube | GBL810 |

## Packaging Information

GBL-2 Dimension — Unit: inch(mm)




| GBL-2 Dimension.Unit:Inch(mm) | | | | |
|---|---|---|---|---|
| Dim | Unit (inch) | | Unit (mm) | |
| | Min | Max | Min | Max |
| A | 0.795 | 0.819 | 20.20 | 20.80 |
| B | 0.413 | 0.437 | 10.50 | 11.10 |
| C | 0.689 | 0.709 | 17.50 | 18.00 |
| D | 0.189 | 0.205 | 4.80 | 5.20 |
| E | C0.098 | | 2.50 | |
| F | 0.091 | 0.106 | 2.30 | 2.70 |
| G | 0.079 | 0.094 | 2.00 | 2.40 |
| H | 0.041 | 0.049 | 1.05 | 1.25 |
| I | 0.130 | 0.146 | 3.30 | 3.70 |
| K | 0.039 | 0.051 | 1.00 | 1.30 |
| L | 0.016 | 0.024 | 0.40 | 0.60 |

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