

## Glass Passivated Bridge Rectifier

|                |               |                |            |
|----------------|---------------|----------------|------------|
| <b>Voltage</b> | <b>1000 V</b> | <b>Current</b> | <b>35A</b> |
|----------------|---------------|----------------|------------|

### Features



- Ideal for printed circuit boards
- UL recognition file number E526209
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

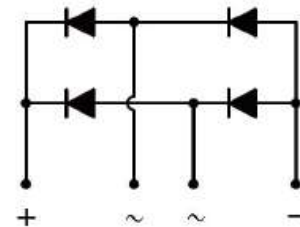
### Mechanical Data

- Case : GBJ-2 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 6.6972 grams

### Application

- Computing Power,
- Server Power/IND/EV
- Air Conditioner out door power board
- High Power/High Efficiency Power
- Home Appliances Power Board
- TV Power

## GBJ-2



| Key Parameters |              |
|----------------|--------------|
| Parameter      | Value        |
| $V_{RRM}$      | <b>1000V</b> |
| $I_F(AV)$      | <b>35A</b>   |
| $I_{FSM}$      | <b>400A</b>  |
| $I_R$          | <b>5uA</b>   |
| <b>Package</b> | <b>GBJ-2</b> |

**Maximum Ratings and Thermal Characteristics** ( $T_A = 25\text{ }^\circ\text{C}$  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                       | 35      | A                    |
|  | Without heatsink                    | 3.3     |                      |
| Peak Forward Surge Current : 8.3 ms<br>Single Half Sine-Wave<br>Superimposed On Rated Load | @ $T_A = 25\text{ }^\circ\text{C}$  | 400     | A                    |
|  | @ $T_A = 125\text{ }^\circ\text{C}$ | 320     |                      |
| Peak Forward Surge Current : 1.0 ms<br>Single Half Sine-Wave<br>Superimposed On Rated Load | @ $T_A = 25\text{ }^\circ\text{C}$  | 800     | A                    |
|  | @ $T_A = 125\text{ }^\circ\text{C}$ | 640     |                      |
| $I^2 t$ rating for fusing ( $t = 8.3\text{ms}$ )   | $I^2 t$                             | 664     | $\text{A}^2\text{S}$ |
| Typical Junction Capacitance<br>Measured at 1 MHZ And Applied $V_R = 4\text{ V}$           | $C_J$                               | 155     | pF                   |
| Typical Thermal Resistance (Note 1)  | $R_{\theta JA}$                     | 8       | $^\circ\text{C/W}$   |
|  | $R_{\theta JL}$                     | 3       |                      |
|  | $R_{\theta JC}$                     | 3       |                      |
| Operating junction and storage temperature range   | $T_J, T_{STG}$                      | -55~150 | $^\circ\text{C}$     |
| Mounting torque @ Recommend torque:5Kg.cm  | Tor                                 | 8       | Kg.cm                |

**Electrical Characteristics** ( $T_A = 25\text{ }^\circ\text{C}$  unless otherwise noted)

| PARAMETER       | SYMBOL | TEST CONDITION   | MIN. | TYP. | MAX. | UNITS |
|-----------------|--------|--|------|------|------|-------|
| Forward Voltage | $V_F$  | $I_F = 17.5\text{ A}, T_J = 25\text{ }^\circ\text{C}$  | -    | -    | 1.1  | V     |
| Reverse Current | $I_R$  | $V_R = 1000\text{ V}, T_J = 25\text{ }^\circ\text{C}$  | -    | -    | 5    | uA    |
|                 |        | $V_R = 1000\text{ V}, T_J = 125\text{ }^\circ\text{C}$ | -    | -    | 100  |       |

NOTES :

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

TYPICAL CHARACTERISTIC CURVES

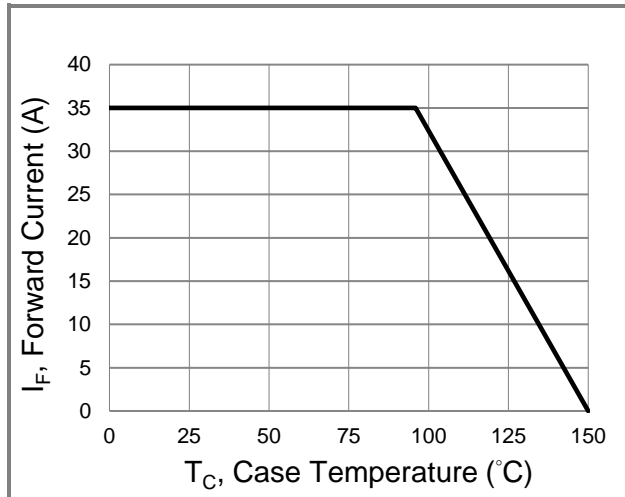


Fig.1 Forward Current Derating Curve

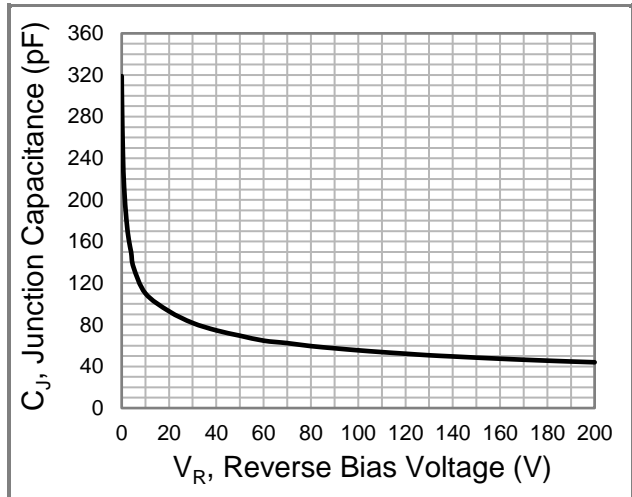


Fig.2 Typical Junction Capacitance

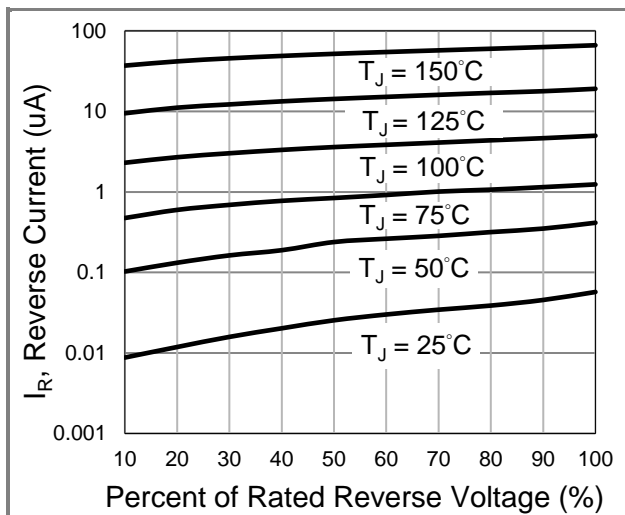


Fig.3 Typical Reverse Characteristics

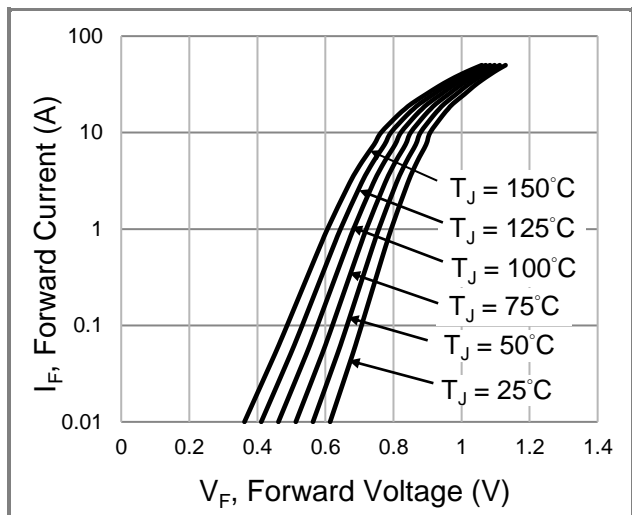
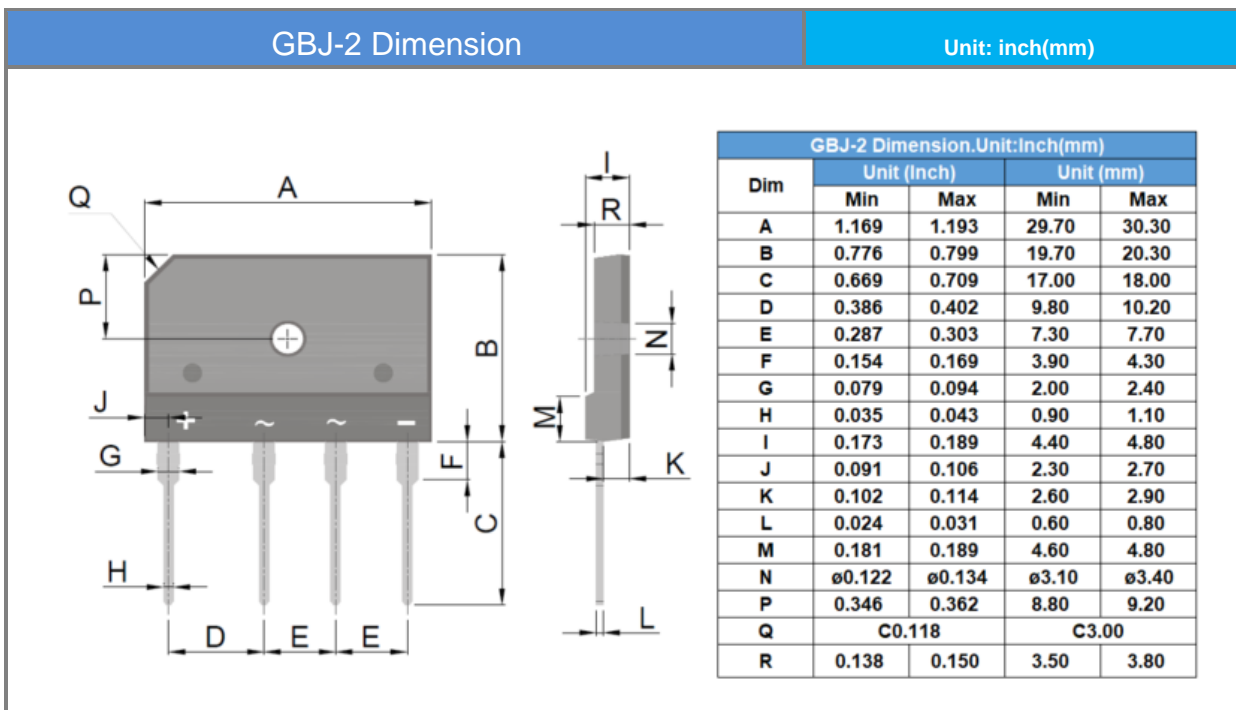


Fig.4 Typical Forward Characteristics

**Part No. Marking Code Version**

| Approved Part No. | Package Type | Packing Type  | Marking |
|-------------------|--------------|---------------|---------|
| GBJ3510           | GBJ-2        | 15 pcs / tube | GBJ3510 |

**Packaging Information**



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