

Glass Passivated Bridge Rectifier

| | | | |
|----------------|---------------|----------------|------------|
| Voltage | 1000 V | Current | 25A |
|----------------|---------------|----------------|------------|

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

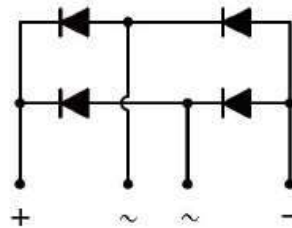
Mechanical Data

- Case : 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} | 1000V |
| $I_F(AV)$ | 25A |
| I_{FSM} | 350A |
| I_R | 5uA |
| Package | GBJ-2 |

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 | $I_{F(AV)}$ | 25 | A |
| | Without heatsink | | 3.6 | |
| Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load | @ $T_A = 25\text{ }^\circ\text{C}$ | I_{FSM} | 350 | A |
| | @ $T_A = 125\text{ }^\circ\text{C}$ | | 280 | |
| Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed On Rated Load | @ $T_A = 25\text{ }^\circ\text{C}$ | I_{FSM} | 700 | A |
| | @ $T_A = 125\text{ }^\circ\text{C}$ | | 560 | |
| $I^2 t$ rating for fusing ($t = 8.3\text{ms}$) | | $I^2 t$ | 508.3 | A^2S |
| Typical Junction Capacitance Measured at 1 MHZ And Applied $V_R = 4\text{ V}$ | | C_J | 115 | pF |
| Typical Thermal Resistance (Note 1) | $R_{\theta JA}$ | | 8 | $^\circ\text{C/W}$ |
| | $R_{\theta JL}$ | | 2 | |
| | $R_{\theta JC}$ | | 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 | $I_F = 12.5\text{ A}, T_J = 25\text{ }^\circ\text{C}$ | - | - | 1.05 | 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 :

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

TYPICAL CHARACTERISTIC CURVES

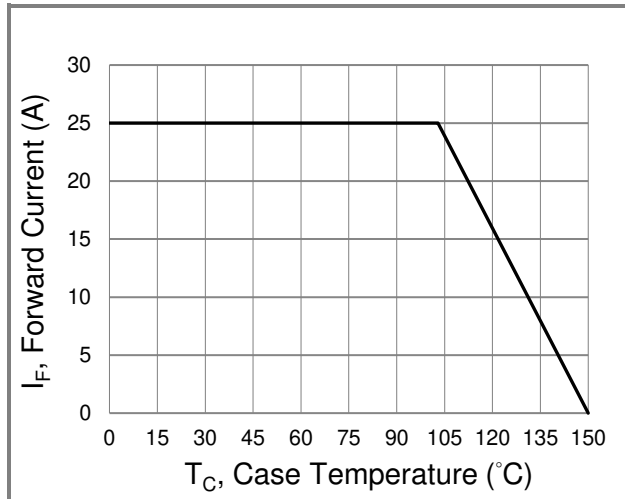


Fig.1 Forward Current Derating Curve

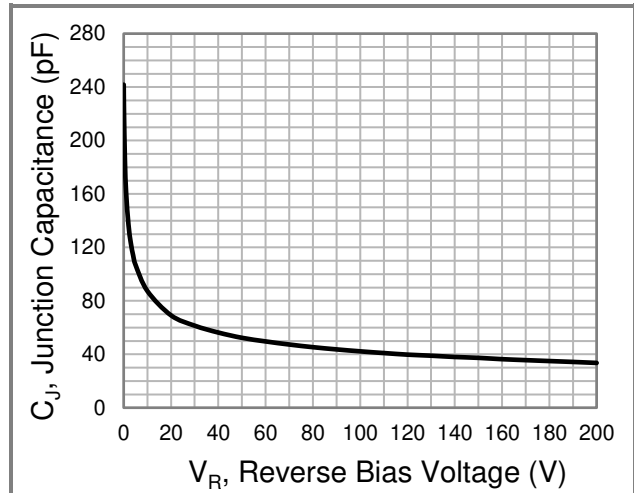


Fig.2 Typical Junction Capacitance

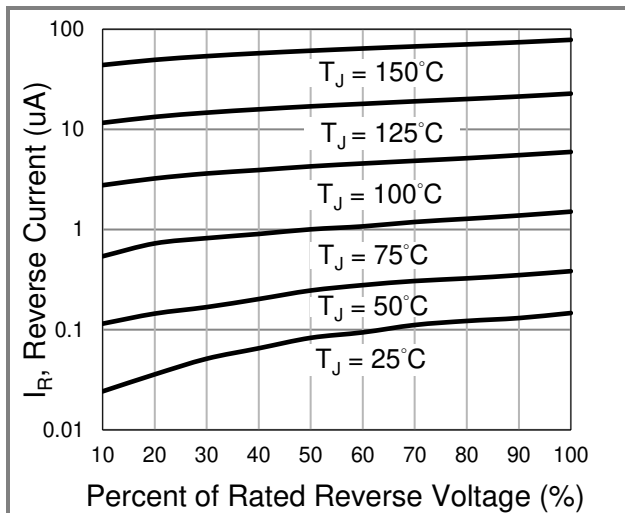


Fig.3 Typical Reverse Characteristics

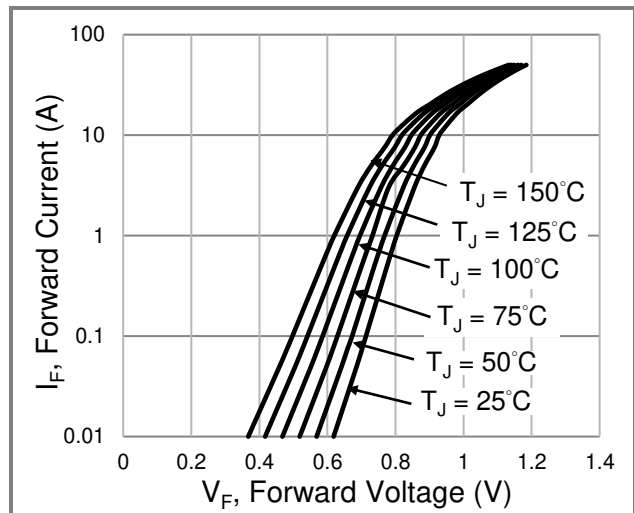
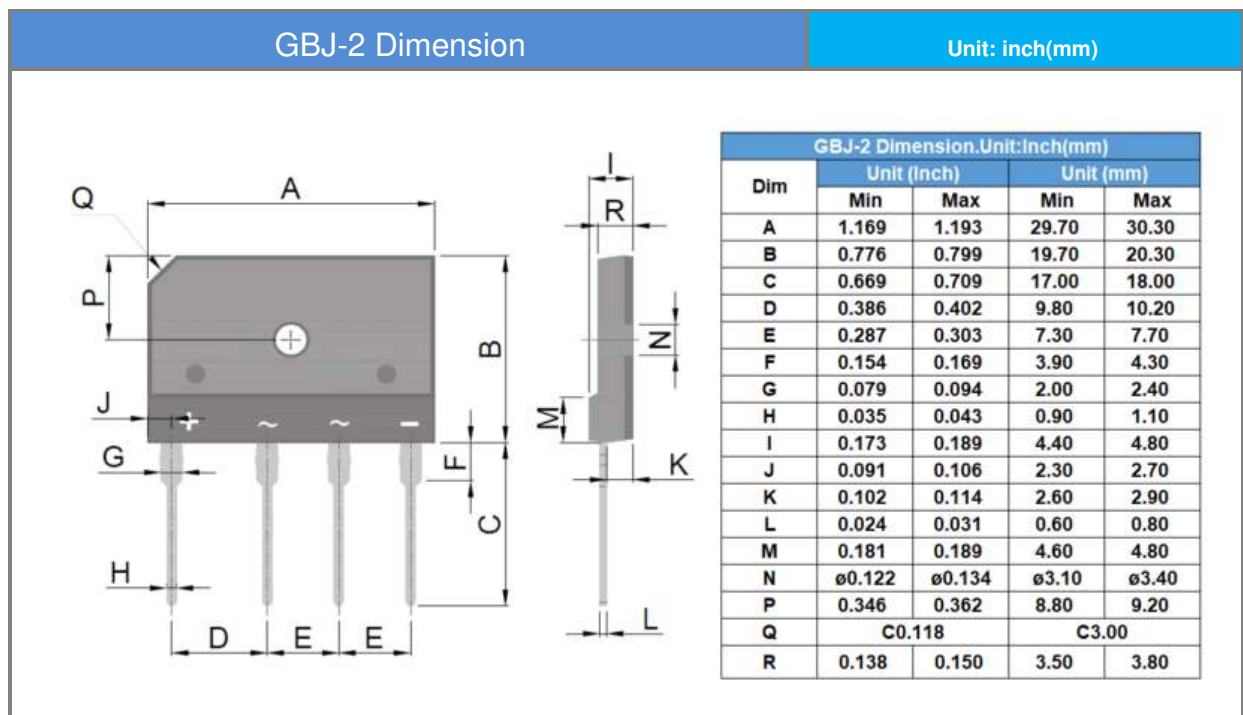


Fig.4 Typical Forward Characteristics

Part No. Marking Code Version

| Approved Part No. | Package Type | Packing Type | Marking |
|-------------------|--------------|---------------|---------|
| GBJ2510 | GBJ-2 | 15 pcs / tube | GBJ2510 |

Packaging Information



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