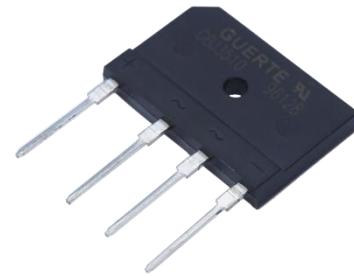


Single Phase Rectifier Bridge

V_{RRM} 200 to 1200V

I_D 25 Amp

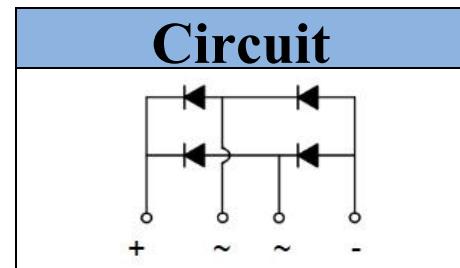


Features

- Glass passivated chip
- Ideal for printed circuit boards
- High surge current capability
- High temperature soldering guaranteed: 265°C/10 seconds

Applications

- Single phase rectifiers for power supplies
- Rectifiers for DC motor field supplies
- Industrial automation equipment
- Input rectifiers for inverter



Module Type

| Type | V _{RRM} | V _{RSM} |
|---------|------------------|------------------|
| GBJ2502 | 200V | 300V |
| GBJ2504 | 400V | 500V |
| GBJ2506 | 600V | 700V |
| GBJ2508 | 800V | 900V |
| GBJ2510 | 1000V | 1100V |
| GBJ2512 | 1200V | 1300V |

■ Maximum Ratings

| Symbol | Item | Conditions | Values | Unit |
|------------------|--------------------------------|--|-------------|------------------|
| I _D | Output Current | Single Phase, Sin Full Wave T _c = 98°C | 25 | A |
| I _{FSM} | Surge Forward Current | T _j = 25°C, t = 50Hz(10ms), V _R = 0V | 350 | A |
| I ² t | Circuit Fusing Consideration | t = 10ms T _j = 25°C | 612 | A ² s |
| V _{Iso} | Isolation Breakdown Voltage | AC 50Hz/60Hz; R.M.S; 1min | 2500 | V |
| T _i | Operating Junction Temperature | | -40 to +150 | °C |
| T _{stg} | Storage Temperature | | -40 to +150 | °C |
| M _s | Mounting Torque | (Recommended torque: 0.65 N·m) | 0.8 | N·m |
| Weight | Module (Approximately) | | 7 | g |

■ Thermal Characteristics

| Symbol | Item | Conditions | Values | Unit |
|----------------------|------------------------|-----------------------------|--------|------|
| R _{th(j-c)} | Thermal Impedance, Max | Junction to Case(Per Total) | 1.0 | °C/W |
| | | Junction to Case(Per Diode) | 4.0 | °C/W |

■ Electrical Characteristics

| Symbol | Item | Conditions | Values | | | Unit |
|------------------|--|--|--------|------|------|------|
| | | | Min. | Typ. | Max. | |
| V _{FM} | Forward Voltage Drop, Max | T _j = 25°C I _F = 12.5A | — | — | 1.1 | V |
| I _{RRM} | Repetitive Peak Reverse Current, Max | T _j = 25°C V _R = V _{RRM} | — | — | 5 | uA |
| | | T _j = 150°C V _R = V _{RRM} | — | — | 0.5 | mA |
| V _{T0} | Threshold Voltage, for power loss calculation only | T _j = 125°C | 0.75 | | | V |
| r _T | Slope Resistance, for power loss calculation only | T _j = 125°C | 7.7 | | | mΩ |

Performance Curves

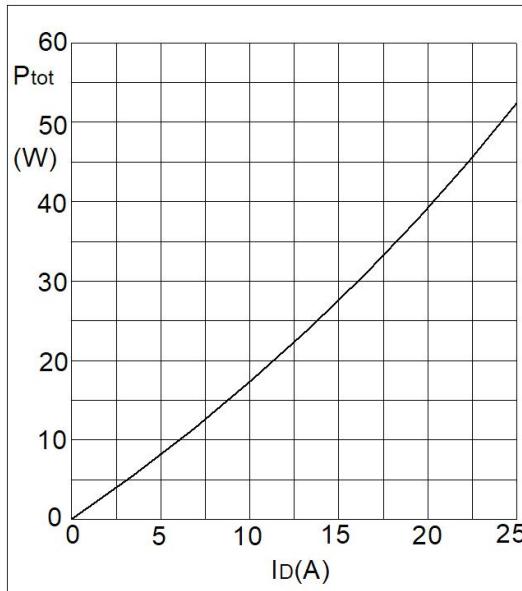


Fig1. Power Dissipation

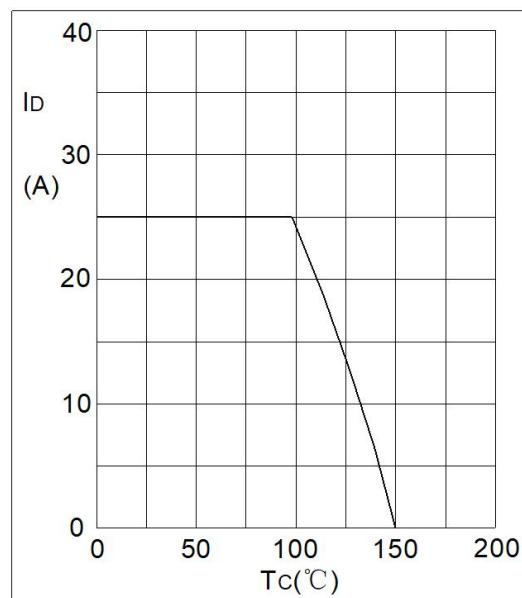


Fig2. Forward Current Derating Curve

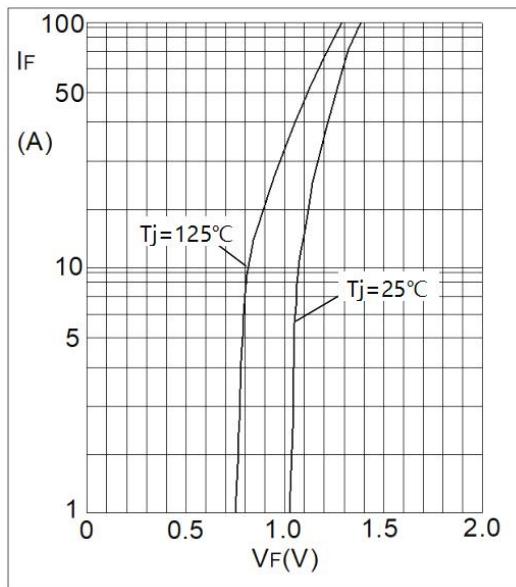


Fig3. Forward Characteristics

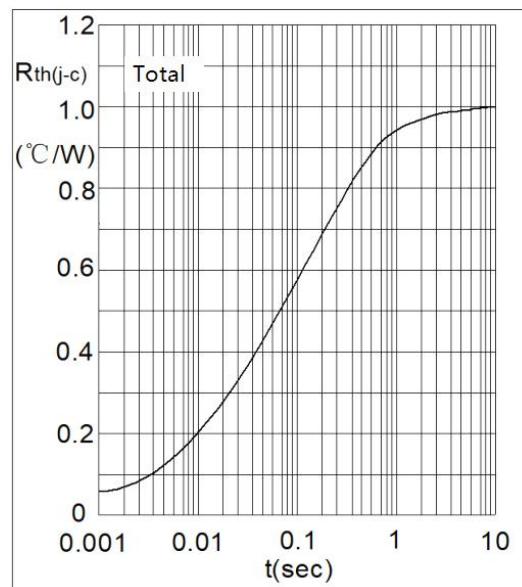


Fig4. Transient Thermal impedance

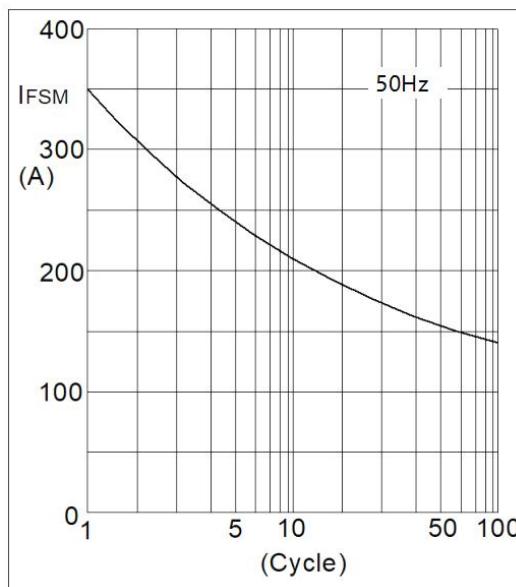
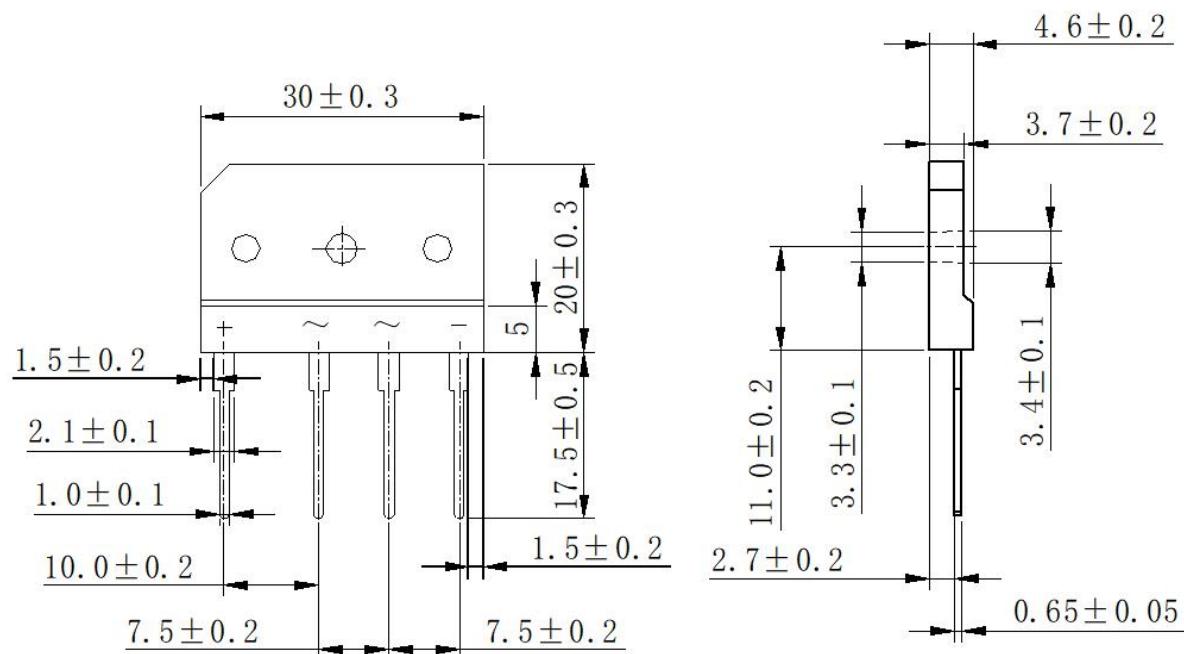


Fig5. Max Non-Repetitive Forward Surge Current

Package Outline Information

CASE: GBJ



Dimensions in mm

*IMPORTANT INFORMATION AND WARNINGS

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