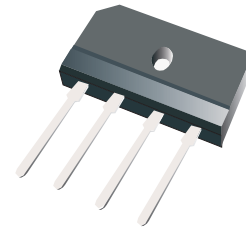


GBJ25005-G Thru. GBJ2510-G

Reverse Voltage: 50 to 1000V

Forward Current: 25.0A

RoHS Device

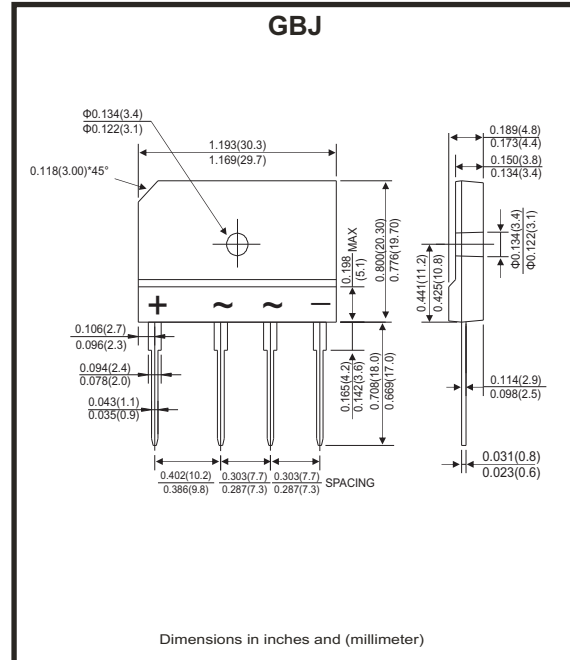


Features

- Rating to 1000V PRV.
- Ideal for printed circuit board
- Low forward voltage drop, high current capability.

Mechanical Data

- Epoxy: U/L 94-V0 rate flame retardant.
- Case: Molded plastic, GBJ
- Mounting position: Any
- Weight: 6.81grams



Maximum ratings and electrical characteristics

Rating at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave ,60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

| Parameter | Symbol | GBJ 25005-G | GBJ 2501-G | GBJ 2502-G | GBJ 2504-G | GBJ 2506-G | GBJ 2508-G | GBJ 2510-G | Unit | |
|--|-----------------|-------------|------------|------------|------------|------------|------------|------------|------|------------------|
| 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 (With heatsink Note2), Rectified Current @Tc=100°C (without hestsink) | I_{AV} | 25.0 | | | | | | | | A |
| | | 4.2 | | | | | | | | |
| Peak Forward Surage Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method) | I_{FSM} | 350 | | | | | | | | A |
| Maximum Forward Voltage at 12.5A DC | V_F | 1.1 | | | | | | | | V |
| Maximum DC Reverse Current @Tj=25°C At Rate DC Blocking Voltage @Tj=125°C | I_R | 10.0 | | | | | | | | μA |
| | | 500 | | | | | | | | |
| I ² T Rating for Fusing(t<8.3ms) | I^2t | 510 | | | | | | | | A ² s |
| Typical Junction Capacitandce Per Element (Note 1) | C_J | 85 | | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JA}$ | 0.6 | | | | | | | | °C/W |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | | °C |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | | °C |

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Device mounted on 300mm*300mm*1.6mm Cu plate heatsink.

Rating and Characteristics Curves (GBJ25005-G Thru. GBJ2510-G)

Fig. 1- Forward Current Derating Curve

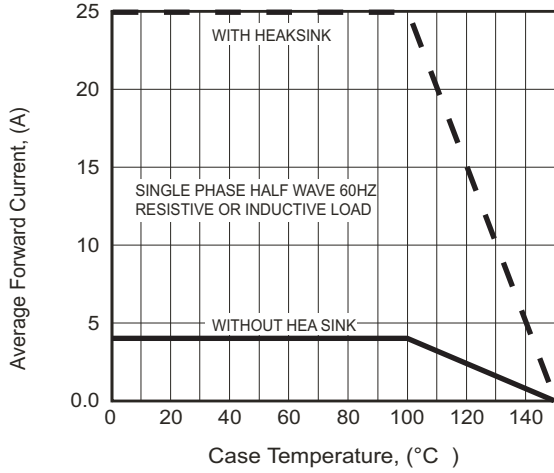


Fig. 2- Typical Forward Characteristics

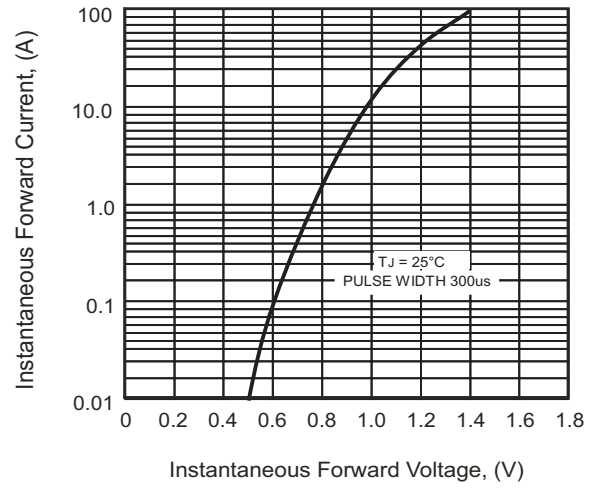


Fig. 3- Maximum Non-Repetitive Surge Current

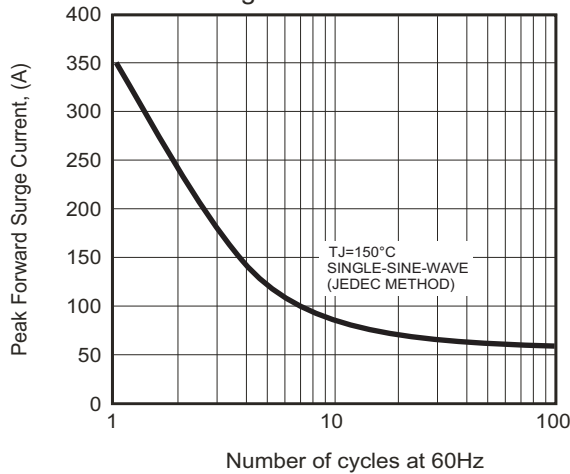


Fig. 4- Typical Junction Capacitance

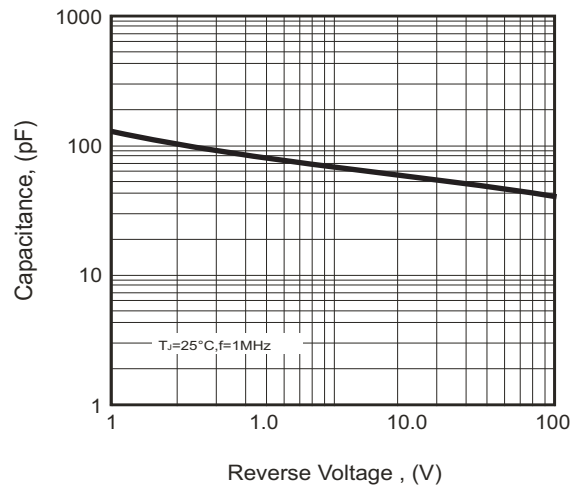
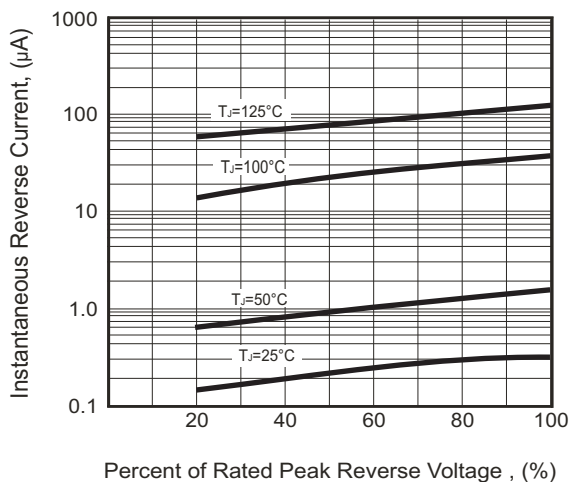
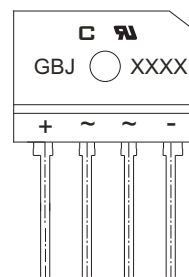


Fig.5- Typical Reverse Characteristics



Marking Code

| Part Number | Marking code |
|-------------|--------------|
| GBJ25005-G | GBJ25005 |
| GBJ2501-G | GBJ2501 |
| GBJ2502-G | GBJ2502 |
| GBJ2504-G | GBJ2504 |
| GBJ2506-G | GBJ2506 |
| GBJ2508-G | GBJ2508 |
| GBJ2510-G | GBJ2510 |



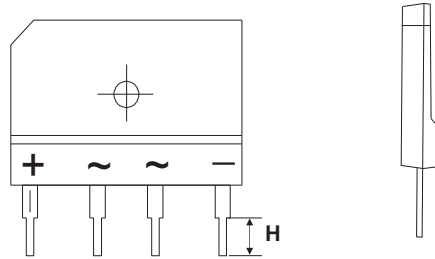
XXX / XXXX = Product type marking code
 □ = Compchip Logo

Standard Packaging

| Case Type | TUBE PACK (B/P) | | |
|-----------|-----------------|-----------|--------------|
| | TUBE (pcs) | BOX (pcs) | CARTON (pcs) |
| GBJ | 15 | 750 | 1,500 |

GBJ25005-03-G Thru. GBJ2510-06-G

Package outline(Cuts the foot)

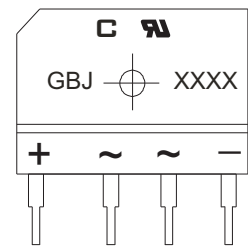


| H | 4.5±0.5 (mm) | 4.0±0.5 (mm) | 10.0±0.5 (mm) | 5.0±0.5 (mm) |
|-------------|---------------|---------------|---------------|---------------|
| Part Number | | | | |
| GBJ25005-G | GBJ25005-03-G | GBJ25005-04-G | GBJ25005-05-G | GBJ25005-06-G |
| GBJ2501-G | GBJ2501-03-G | GBJ2501-04-G | GBJ2501-05-G | GBJ2501-06-G |
| GBJ2502-G | GBJ2502-03-G | GBJ2502-04-G | GBJ2502-05-G | GBJ2502-06-G |
| GBJ2504-G | GBJ2504-03-G | GBJ2504-04-G | GBJ2504-05-G | GBJ2504-06-G |
| GBJ2506-G | GBJ2506-03-G | GBJ2506-04-G | GBJ2506-05-G | GBJ2506-06-G |
| GBJ2508-G | GBJ2508-03-G | GBJ2508-04-G | GBJ2508-05-G | GBJ2508-06-G |
| GBJ2510-G | GBJ2510-03-G | GBJ2510-04-G | GBJ2510-05-G | GBJ2510-06-G |

Dimensions in inches and (millimeter)

Marking Code

| 4.5±0.5 (mm) | 4.0±0.5 (mm) | 10.0±0.5 (mm) | 5.0±0.5 (mm) | Marking code |
|---------------|---------------|---------------|---------------|--------------|
| GBJ25005-03-G | GBJ25005-04-G | GBJ25005-05-G | GBJ25005-06-G | GBJ25005 |
| GBJ2501-03-G | GBJ2501-04-G | GBJ2501-05-G | GBJ2501-06-G | GBJ2501 |
| GBJ2502-03-G | GBJ2502-04-G | GBJ2502-05-G | GBJ2502-06-G | GBJ2502 |
| GBJ2504-03-G | GBJ2504-04-G | GBJ2504-05-G | GBJ2504-06-G | GBJ2504 |
| GBJ2506-03-G | GBJ2506-04-G | GBJ2506-05-G | GBJ2506-06-G | GBJ2506 |
| GBJ2508-03-G | GBJ2508-04-G | GBJ2508-05-G | GBJ2508-06-G | GBJ2508 |
| GBJ2510-03-G | GBJ2510-04-G | GBJ2510-05-G | GBJ2510-06-G | GBJ2510 |



XXX / XXXX = Product type marking code

☐ = Compchip Logo

Standard Packaging

| Case Type | TUBE PACK (B/P) | | |
|-----------|-----------------|-----------|--------------|
| | TUBE (pcs) | BOX (pcs) | CARTON (pcs) |
| GBJ | 15 | 750 | 1,500 |