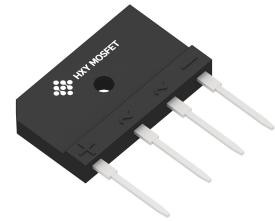




Features

- This series is UL listed under the Recognized Component Index, file number E142814
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500VRMS
Ideal for printed circuit boards
- High surge current capability

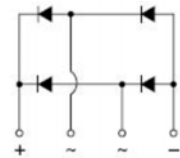


GBJ(GBJ6)

Package Marking and Ordering Information

| Product ID | Pack | Marking | Qty(PCS) |
|------------------|-----------|---------|----------|
| GBJ25005-GBJ2510 | GBJ(GBJ6) | GBJ25xx | 500 |

xx: From 005-10.



Maximum Ratings (Ta=25°C unless otherwise noted)

Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| Parameter | Symbol | GBJ 25005 | GBJ 2501 | GBJ 2502 | GBJ 2504 | GBJ 2506 | GBJ 2508 | GBJ 2510 | Unit |
|--|------------------|--------------|----------|----------|----------|----------|----------|----------|--------------------|
| Maximum repetitive peak reverse voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS bridge input voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | v |
| Maximum DC blocking voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward (with heatsink note1) rectified current at Tc=100°C (without heatsink) | IF(AV) | 25.0 4.2 | | | | | | | A |
| Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method) | IFSM | 350 | | | | | | | A |
| Rating for fusing (t<8.3ms) | I ² t | 510 | | | | | | | A ² sec |
| Typical thermal resistance per element (note 1) | RthJC | 1.0 | | | | | | | °C/W |
| Operating junction and storage temperature range | TJ, TSTG | -55 to + 150 | | | | | | | °C |

Electrcal Charcteristics (Ta=25 unless otherwise specified)

| Parameter | Symbol | GBJ 25005 | GBJ 2502 | GBJ 2503 | GBJ 2504 | GBJ 2506 | GBJ 2508 | GBJ 2510 | Unit |
|---|--------|-------------|----------|----------|----------|----------|----------|----------|------|
| Maximum instantaneous forward voltage drop per leg at 12.5 A | VF | 1.05 | | | | | | | V |
| Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C | IR | 10.0 500 | | | | | | | μA |

Notes: (1) Device mounted on 250mm x 250mm x 20mm aluminum plate heatsink.



Typical Characteristics

Fig. 1 Derating Curve for Output Rectified Current

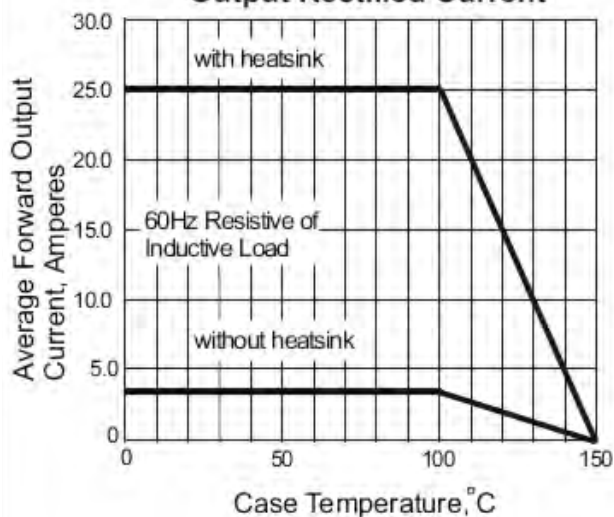


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

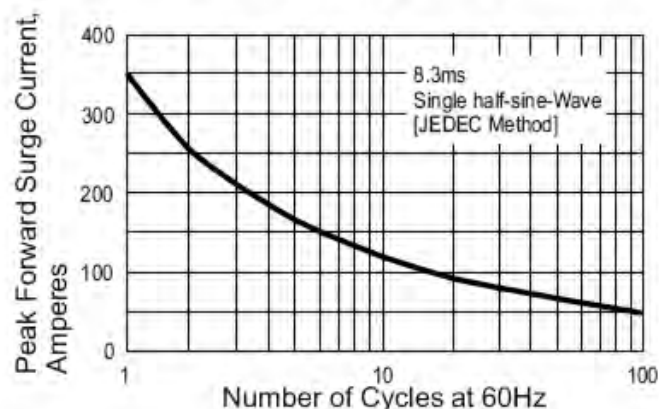


Fig. 3 Typical Instantaneous Forward Characteristics

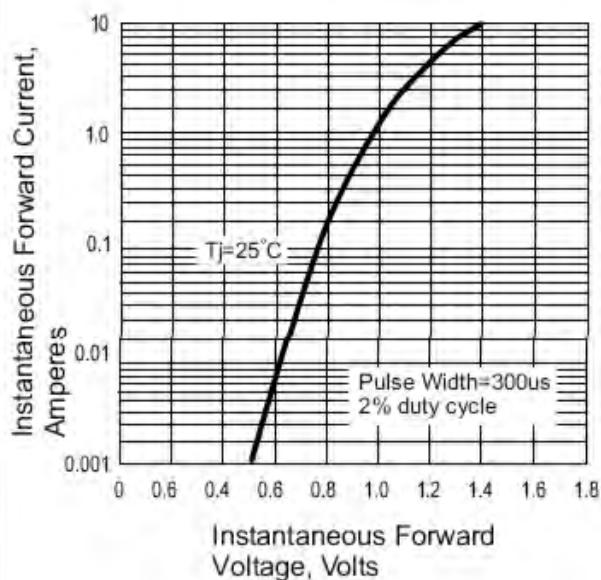


Fig. 4 Typical Reverse Characteristics at $T_J = 25^\circ\text{C}$

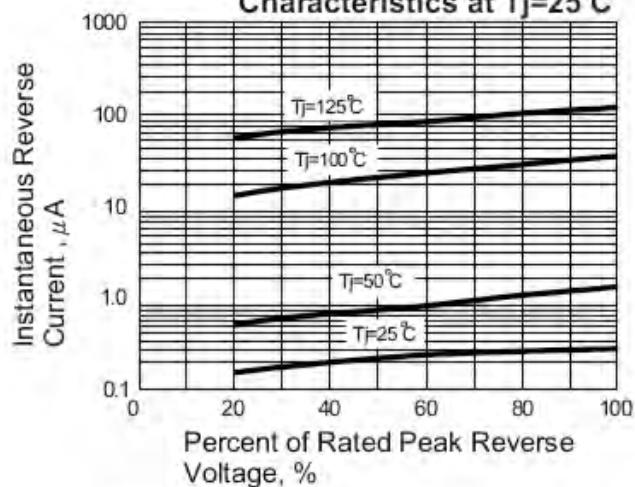
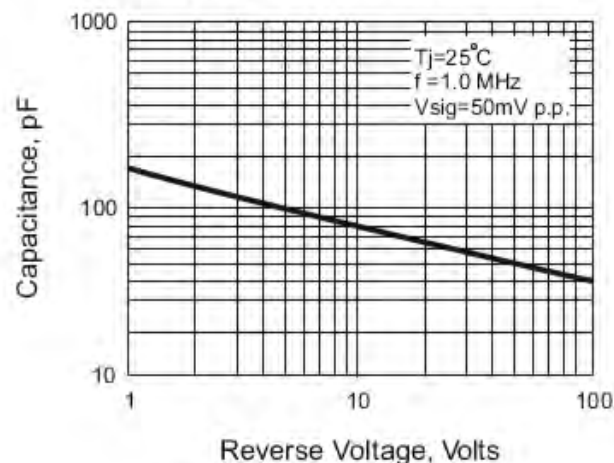
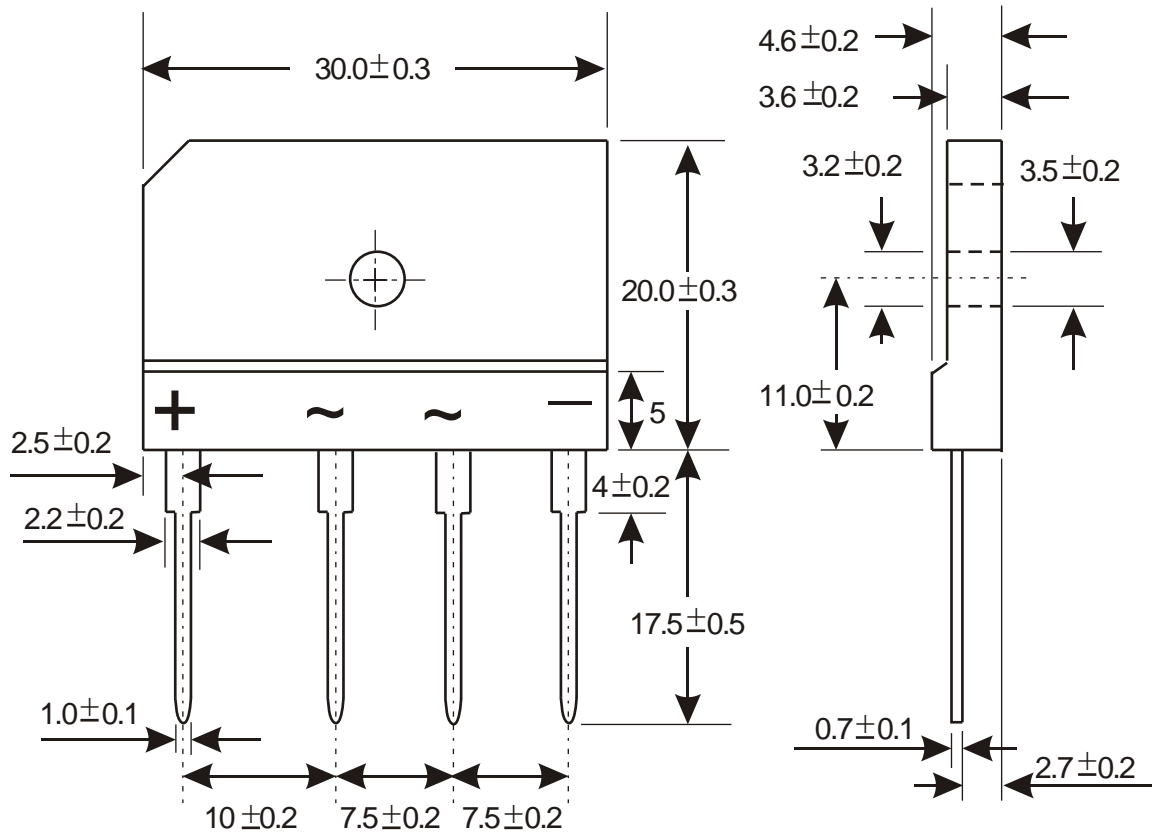


Fig. 5 Typical Junction Capacitance





Package Information
GBJ(GBJ6)





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