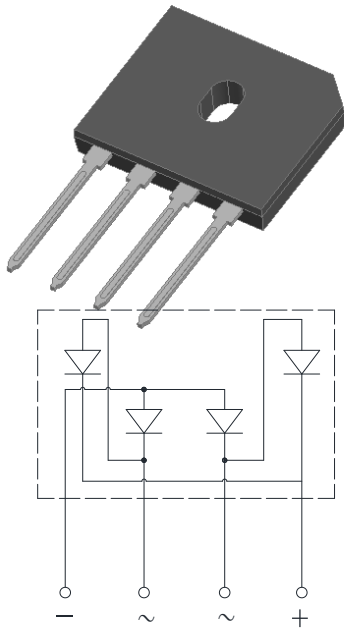


Bridge Rectifier



Features

- UL recognition, file #E230084
- Ideal for printed circuit boards
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for monitor, TV, printer, power supply, switching mode power supply, adapter, audio equipment, and home appliances applications.

Mechanical Data

- **Package:** GBU
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

■Maximum Ratings (Ta=25°C Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | GBU10005A | GBU1001A | GBU1002A | GBU1004A | GBU1006A | GBU1008A | GBU1010A |
|---|------------------------------|------------------|-----------|----------|----------|----------|----------|----------|----------|
| Device marking code | | | GBU10005A | GBU1001A | GBU1002A | GBU1004A | GBU1006A | GBU1008A | GBU1010A |
| Repetitive peak reverse voltage | VRRM | V | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| Average rectified output current @60Hz half sine wave, R-load | With heatsink Tc =80°C | IO | A | 10.0 | | | | | |
| | Without heatsink Ta =25°C | | | 3.6 | | | | | |
| Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, Tj=25°C | IFSM | A | 200 | | | | | | |
| Current squared time @ 1ms≤t≤8.3ms Tj=25°C, Rating of per diode | I ² t | A ² S | 166 | | | | | | |
| Storage temperature | Tstg | °C | -55 ~+150 | | | | | | |
| Junction temperature | Tj | °C | -55 ~+150 | | | | | | |
| Dielectric strength @terminals to case, AC 1 minute | Vdis | KV | 2.5 | | | | | | |
| Mounting torque @recommend torque: 5kg·cm | Tor | kg·cm | 8 | | | | | | |

■Electrical Characteristics (Ta=25°C Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | TEST CONDITIONS | GBU10005A | GBU1001A | GBU1002A | GBU1004A | GBU1006A | GBU1008A | GBU1010A |
|---|--------|------|-----------------|-----------|----------|----------|----------|----------|----------|----------|
| Maximum instantaneous forward voltage drop per diode | VF | V | IFM=5.0A | 1.00 | | | | | | |
| Maximum DC reverse current at rated DC blocking voltage per diode | IRRM | μA | VRM=VRRM | 5 | | | | | | |



GBU10005A THRU GBU1010A

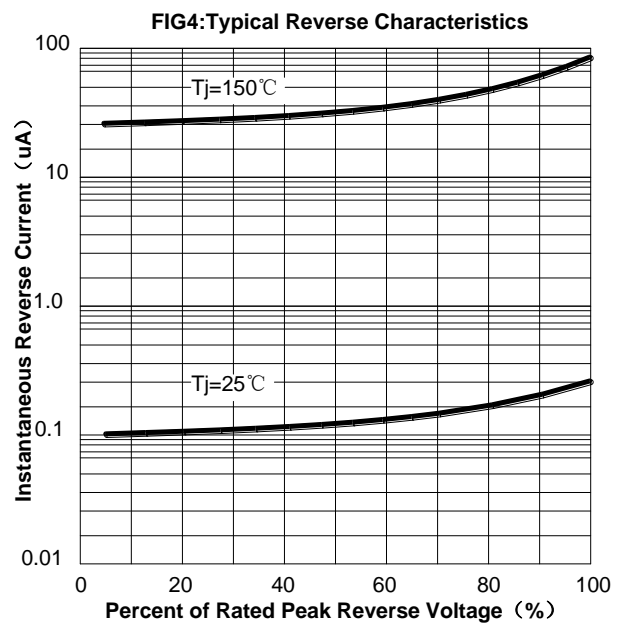
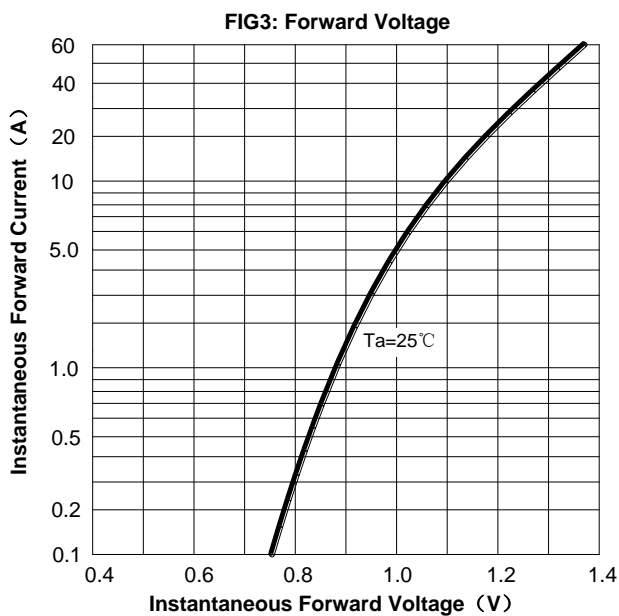
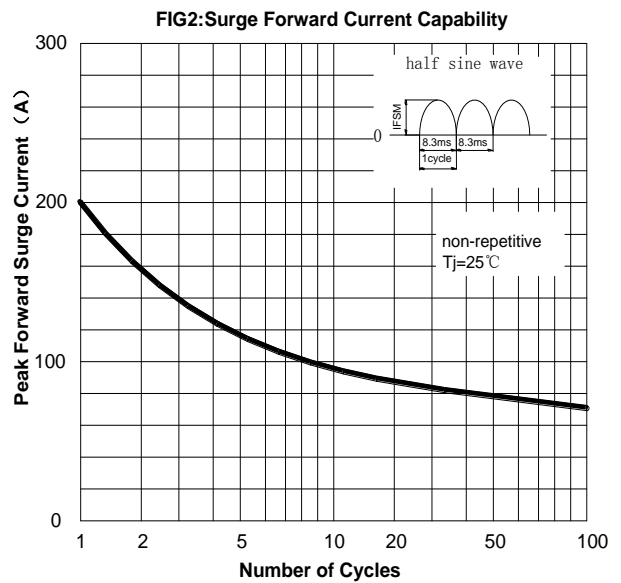
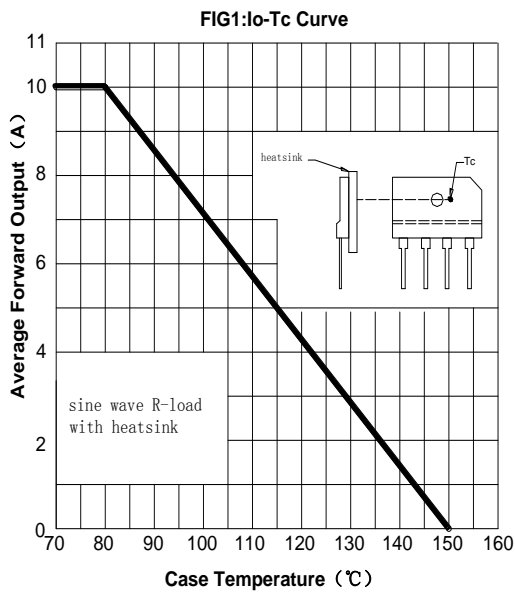
■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

| PARAMETER | | SYMBOL | UNIT | GBU10005A | GBU1001A | GBU1002A | GBU1004A | GBU1006A | GBU1008A | GBU1010A |
|--------------------|--|-------------------|------|-----------|----------|----------|----------|----------|----------|----------|
| Thermal Resistance | Between junction and ambient, Without heatsink | R _{θJ-A} | °C/W | 25.0 | | | | | | |
| | Between junction and case, With heatsink | R _{θJ-C} | | 2.3 | | | | | | |

■ Ordering Information (Example)

| PREFERED P/N | PACKING CODE | UNIT WEIGHT(g) | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|-------------------------|--------------|------------------|----------------------|-------------------------|----------------------------|---------------|
| GBU10005A THRU GBU1010A | B1 | Approximate 3.96 | 20 | 1000 | 2000 | TUBE |

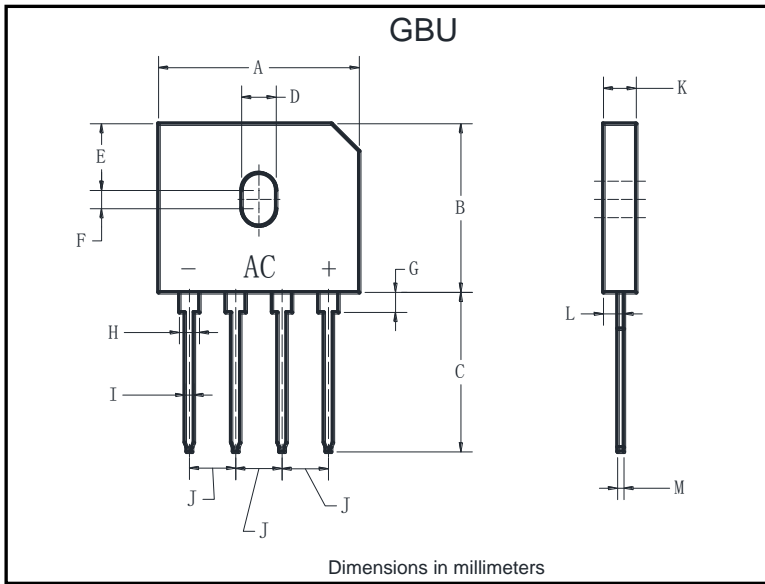
■ Characteristics (Typical)





GBU10005A THRU GBU1010A

■ Outline Dimensions



| GBU | | |
|-----|-------|-------|
| Dim | Min | Max |
| A | 21.80 | 22.30 |
| B | 18.30 | 18.80 |
| C | 17.50 | 18.00 |
| D | 3.50 | 4.10 |
| E | 7.40 | 7.90 |
| F | 1.65 | 2.16 |
| G | 1.91 | 2.54 |
| H | 2.06 | 2.54 |
| I | 1.02 | 1.27 |
| J | 4.83 | 5.33 |
| K | 3.30 | 3.56 |
| L | 2.40 | 2.66 |
| M | 0.46 | 0.56 |



GBU10005A THRU GBU1010A

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