

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

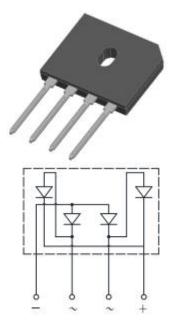
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant

• 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)

| PARAMET | ER | SYMBOL | UNIT | GBU10005 | GBU1001 | GBU1002 | GBU1004 | GBU1006 | GBU1008 | GBU1010 |
|--|----|------------------|------------------|-----------|---------|---------|---------|---------|---------|---------|
| Device marking code | | | | GBU10005 | GBU1001 | GBU1002 | GBU1004 | GBU1006 | GBU1008 | GBU1010 |
| Repetitive peak reverse voltage | | V _{RRM} | V | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| Average rectified output current @60Hz half sine With heatsink T _C =80°C Without heatsink | | Ю | А | 10.0 | | | | | | |
| wave, R-load $T_a = 25^{\circ}C$ | | | | 3.2 | | | | | | |
| Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, Tj=25°C | | IFSM | Α | 175 | | | | | | |
| Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode | | l ² t | A ² S | 127 | | | | | | |
| Storage temperature | | Tstg | $^{\circ}$ | -55 ~+150 | | | | | | |
| Junction temperature | | Tj | $^{\circ}$ | -55 ~+150 | | | | | | |
| Dielectric strength @ terminals to case, AC 1 minute | | Vdis | KV | 2 | | | | | | |
| Mounting torque @recommend torque: 5kg • cm | | Tor | kg • cm | 8 | | | | | | |

■Electrical Characteristics $(T_a=25$ $^{\circ}$ C Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | TEST CONDITIONS | GBU10005 | GBU1001 | GBU1002 | GBU1004 | GBU1006 | GBU1008 | GBU1010 |
|---|------------------|------|-----------------------------------|----------|---------|---------|---------|---------|---------|---------|
| Maximum instantaneous forward voltage drop per diode | VF | > | IFM=5.0A | | | | 1.00 | | | |
| Maximum DC reverse current at rated DC blocking voltage per diode | I _{RRM} | μA | V _{RM} =V _{RRM} | 5 | | | | | | |

GBU10005 THRU GBU1010

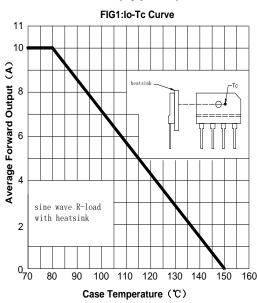
■Thermal Characteristics (T_a=25°C Unless otherwise specified)

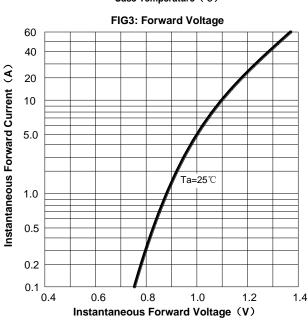
| F | PARAMETER | SYMBOL | UNIT | GBU10005 | GBU1001 | GBU1002 | GBU1004 | GBU1006 | GBU1008 | GBU1010 |
|------------|--|--------|------|----------|---------|---------|---------|---------|---------|---------|
| Thermal | Between junction and ambient, Without heatsink | RøJ-A | °€∧W | 25.0 | | | | | | |
| Resistance | Between junction and case, With heatsink | RøJ-C | C/VV | 2.3 | | | | | | |

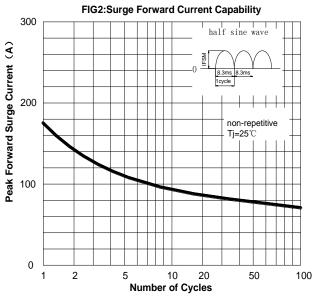
■Ordering Information (Example)

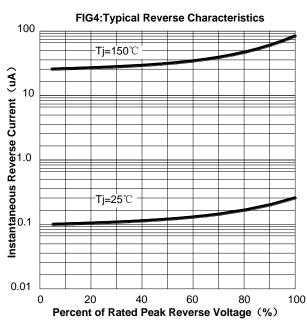
| PREFERED P/N | PACKING CODE | UNIT WEIGHT(g) | MINIIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|-----------------------|-----------------|------------------|--------------------------|-------------------------|-------------------------------|------------------|
| GBU10005 THRU GBU1010 | B1 | Approximate 3.96 | 20 | 1000 | 2000 | TUBE |

■ Characteristics (Typical)





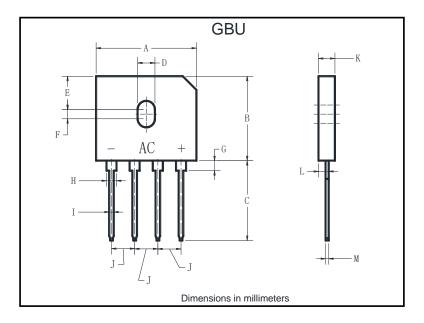






GBU10005 THRU GBU1010

■ Outline Dimensions



| GBU | | | | | | |
|-----|-------|-------|--|--|--|--|
| Dim | Min | Max | | | | |
| Α | 21.80 | 22.30 | | | | |
| В | 18.30 | 18.80 | | | | |
| С | 17.50 | 18.00 | | | | |
| D | 3.50 | 4.10 | | | | |
| Е | 7.40 | 7.90 | | | | |
| F | 1.65 | 2.16 | | | | |
| G | 1.91 | 2.54 | | | | |
| Н | 2.06 | 2.54 | | | | |
| I | 1.02 | 1.27 | | | | |
| J | 4.83 | 5.33 | | | | |
| K | 3.30 | 3.56 | | | | |
| L | 2.40 | 2.66 | | | | |
| М | 0.46 | 0.56 | | | | |



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