

Io: 4.0 SILICON BRIDGE RECTIFIER

PRV: 50 - 1000 Volts

Features

- · High current capability
- · High surge current capability
- · High reliability
- · Low reverse current
- Low forward voltage drop
- · Fast switching for high efficiency
- · RoHS compliant package

Mechanical Data

• Case: Reliable low cost construction utilizing molded

plastic technique

· Polarity: Polarity symbols marked on case

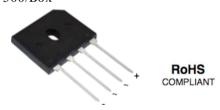
· Mounting position: Any

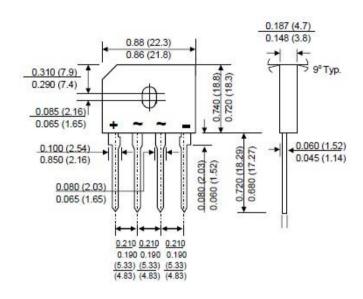
• Weight: 4.0 grams

Package type: GBU

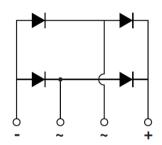
Packing & Order Information

500/Box





Graphic symbol



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| 1 of capacitive load, deface cuttent by 20% | | | | | | | | | |
|---|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------|
| Rating | Symbol | GBU 4A | GBU 4B | GBU 4D | GBU 4G | GBU 4J | GBU 4K | GBU 4M | 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 _R | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified | I | 4.0 | | | | | | | A |
| Current Tc = 100 °C | I _{F(AV)} | | | | | | | | |
| Maximum Peak Forward Surge Current | | | | | | | | | |
| (Single sine-wave Superimposed on | I _{FSM} 150 | | | | | | A | | |
| rated load) | | | | | | | | | |



Io: 4.0 SILICON BRIDGE RECTIFIER

PRV: 50 - 1000 Volts

| Rating at 25 °C ambient temperature unless otherwise specifie. Single phase, half wave, 60 Hz, resistive or inductive load | | | | | | | | | | | |
|---|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------|--|--|
| For capacitive load, derate current by 20% | | | | | | | | | | | |
| Rating | Symbol | GBU 4A | GBU 4B | GBU 4D | GBU 4G | GBU 4J | GBU 4K | GBU 4M | Unit | | |
| Maximum Instantaneous Forward | | 1.0 | | | | | | | V | | |
| Voltage drop per leg at IF = 4.0 A | V _F | | | | | | | | | | |
| Maximum DC Reverse Current Ta = 25°C | I_R | 5 | | | | | | μA | | | |
| at Rated DC Blocking Voltage Ta = 100°C | $I_{R(H)}$ | 500 | | | | | | μΑ | | | |
| Typical Junction capacitance (Note 3) | Cı | 100 45 | | | | | | pF | | | |
| Typical Thermal Resistance, Junction to | | 4.2 | | | | | | | °C/W | | |
| Case (Note 1) | R _{θJС} | | | | | | | | | | |
| Typical Thermal Resistance, Junction to | n. | | | | | | | | °C/W | | |
| Ambient (Note 2) | $R_{\theta JA}$ 22 | | | | | | | | | | |
| Operating Junction and Storage | T. T. | | 55 150 | | | | | | 0.0 | | |
| Temperature Range | T _J ,T _{STG} -55 to +150 | | | | | | | °C | | | |

Notes:

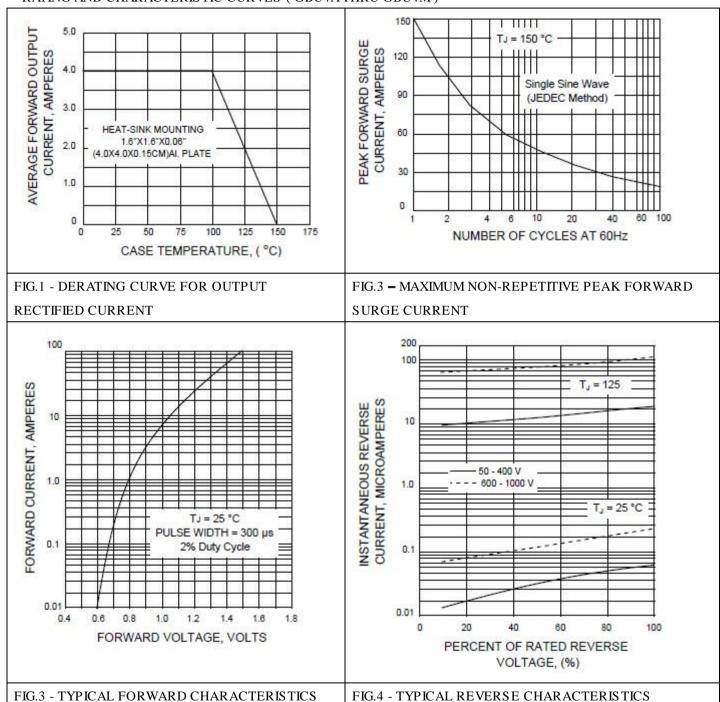
- (1) Unit case mounted on 1.6"x1.6"x0.06" THK (4.0x4.0x0.15cm) Al. Plate
- (2) Units mounted on P.C. Board with 0.5"x0.5" (12mmx15mm) copper pads and 0.375"(9.5mm) lead length
- (3) Measured at 1.0 MHz and applied reverse voltage of 4.0 volt



Io: 4.0 SILICON BRIDGE RECTIFIER

PRV: 50 - 1000 Volts

■RATING AND CHARACTERISTIC CURVES (GBU4ATHRU GBU4M)





Io: 4.0 SILICON BRIDGE RECTIFIER

PRV: 50 - 1000 Volts

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Bruckewell Technology Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Bruckewell"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product. Bruckewell makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Bruckewell disclaims

- (i) Any and all liability arising out of the application or use of any product.
- (ii) Any and all liability, including without limitation special, consequential or incidental damages.
- (iii) Any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Bruckewell's knowledge of typical requirements that are often placed on Bruckewell products in generic applications.

Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time.

Product specifications do not expand or otherwise modify Bruckewell's terms and conditions of purchase, including but not limited to the warranty expressed therein.