

GBU4AL_ML

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

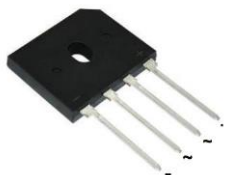
Mechanical Data

- Case : Reliable low cost construction utilizing molded plastic technique
- Polarity : Polarity symbols marked on case
- Mounting position : Any
- Weight : 4.0 grams

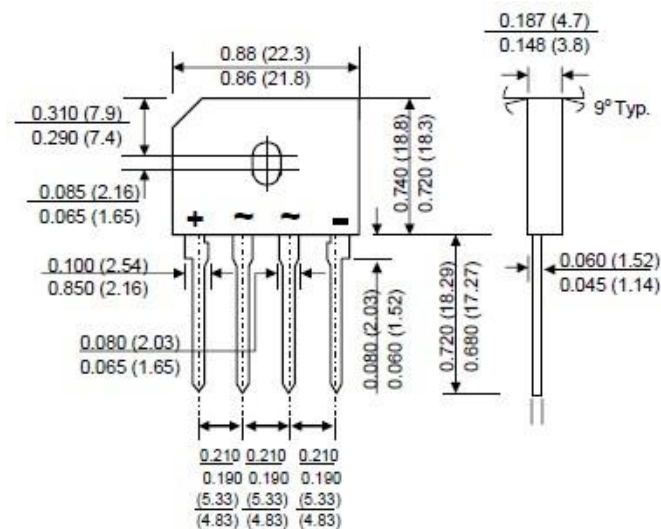
Package type **P** : GBU

Packing & Order Information

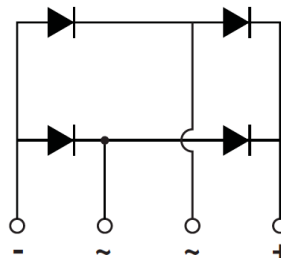
500/Box



RoHS
COMPLIANT



Graphic symbol



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specific.

Single phase, half wave, 60 Hz, resistive or inductive load

For capacitive load, derate current by 20%

| Rating | Symbol | GBU 4AL | GBU 4BL | GBU 4DL | GBU 4GL | GBU 4JL | GBU 4KL | GBU 4ML | 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 Current $T_c = 100\text{ }^\circ\text{C}$ | $I_{F(AV)}$ | 4.0 | | | | | | | A |
| Maximum Peak Forward Surge Current (Single sine-wave Superimposed on rated load) | I_{FSM} | 150 | | | | | | | A |
| Maximum Instantaneous Forward Voltage drop per leg at $I_F = 2.0\text{ A}$ | V_F | 0.9 | | | | | | | V |

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|--|-----------------------------------|-------------|------------|------------|------------|------------|------------|------------|------|
| Maximum DC Reverse Current Ta = 25°C | I _R | 5 | | | | | | | μA |
| at Rated DC Blocking Voltage Ta = 125°C | I _{R(H)} | 500 | | | | | | | μA |
| Typical Junction capacitance (Note 3) | C _J | 100 | | | | 45 | | | pF |
| Typical Thermal Resistance, Junction to Case (Note 1) | R _{θJC} | 4.2 | | | | | | | °C/W |
| Typical Thermal Resistance, Junction to Ambient (Note 2) | R _{θJA} | 22 | | | | | | | °C/W |
| Operating Junction and Storage Temperature Range | T _J , T _{STG} | -55 to +150 | | | | | | | °C |

Notes :

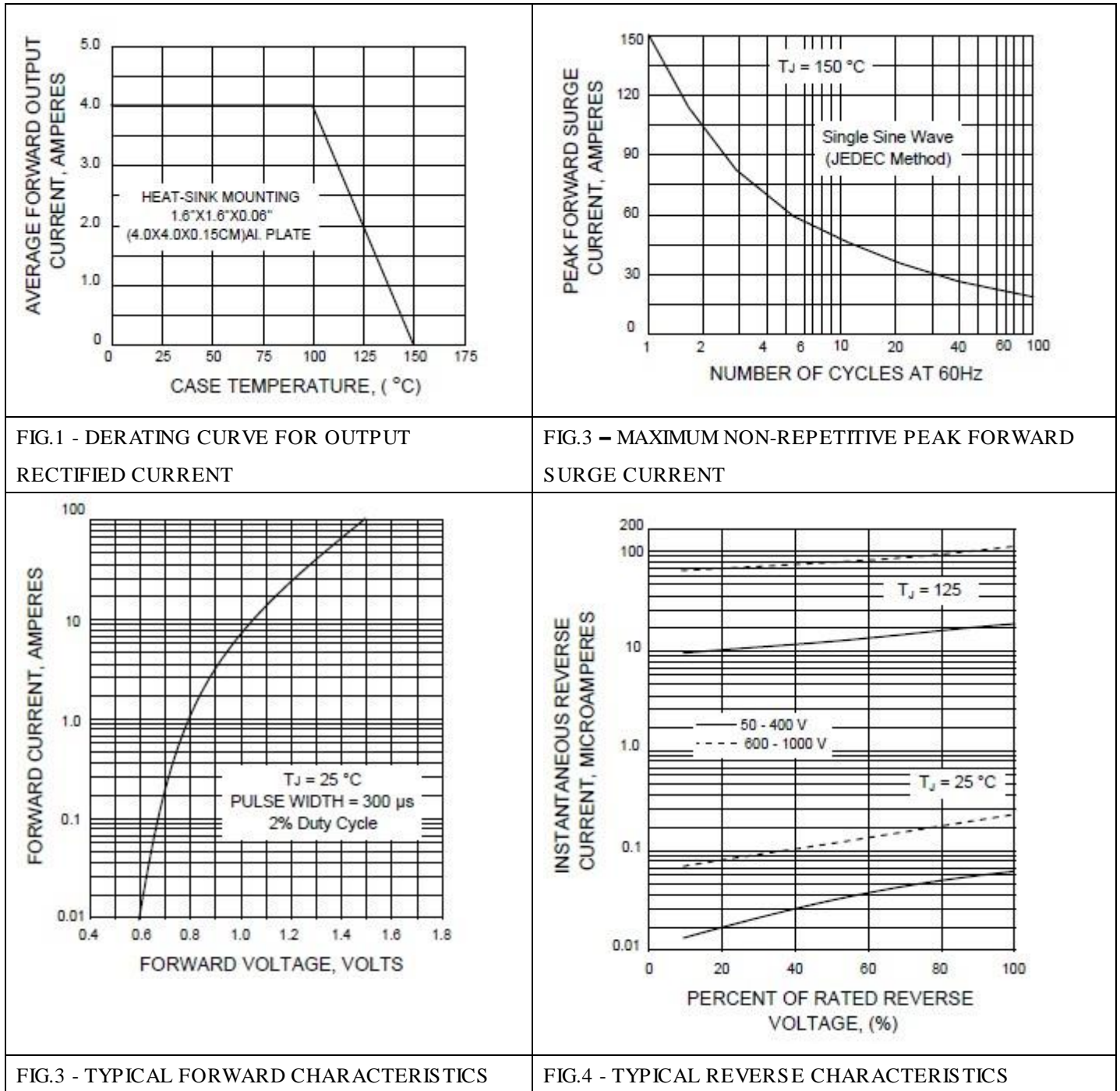
- (1) Unit case mounted on 1.6"x1.6"x0.06" THK (4.0x4.0x0.15cm) Al. Plate
- (2) Units mounted on P.C. Board with 0.5"x0.5" (12mmx15mm) copper pads and 0.375"(9.5mm) lead length
- (3) Measured at 1.0 MHz and applied reverse voltage of 4.0 volt

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■ RATING AND CHARACTERISTIC CURVES (GBU4AL THRU GBU4ML)



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Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE

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