

Bridge Rectifier

GBU6B

100V / 6A

DATASHEET

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GBU6A THRU GBU6M

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

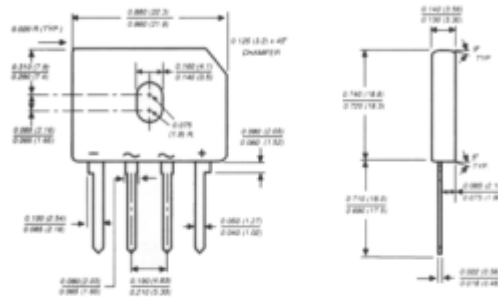
Reverse Voltage - 50 to 1000 Volts Forward Current - 6.0 Amperes

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ This series is UL listed under the Recognized Component Index, file number E54214
- ◆ High case dielectric strength of 1500 VRMS
- ◆ Ideal for printed circuit boards
- ◆ Glass passivated chip junctions
- ◆ High surge overload rating
- ◆ High temperature soldering guaranteed: 260°C/10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension



Case Style GBU



Polarity shown on front side of case, positive lead by beveled corner

Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Moulded plastic body over passivated chip

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Mounting Position: Any (NOTE 2)

Mounting Torque: 5 in. - lb. max.

Weight: 0.15 ounce, 4.0 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

| | SYMBOLS | GBU 6A | GBU 6B | GBU 6D | GBU 6G | GBU 6J | GBU 6K | GBU 6M | UNITS |
|--|--------------|--------------|--------|--------|--------|--------|--------|--------|-------|
| Maximum repetitive peak reverse voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC blocking voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum average forward rectified output current at TC=100°C (NOTE 1, 2) | I(AV) | 6.0 | | | | | | | Amps |
| Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method) TJ=150°C | IFSM | 175.0 | | | | | | | Amps |
| Rating for fusing (I<8.3ms) | IFt | 127.0 | | | | | | | A'sec |
| Maximum instantaneous forward voltage drop per leg at 6.0A | VF | 1.0 | | | | | | | Volts |
| Maximum DC reverse current at rated DC blocking voltage per leg | IR | 5.0 500.0 | | | | | | | µA |
| Typical junction capacitance per leg (NOTE 3) | CJ | 211.0 | | | | 94.0 | | | pF |
| Typical thermal resistance per leg (NOTE 1, 2) | REJA REJC | 7.4 2.2 | | | | | | | °C/W |
| Operating junction and storage temperature range | TJ, TSTG | -55 to +150 | | | | | | | °C |

NOTES:

- (1) Units case mounted on 2.6 x 1.4 x 0.06" thick (6.5 x 3.5 x 0.15 cm) Al. Plate heatsink
- (2) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screws
- (3) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

RATINGS AND CHARACTERISTICS CURVES GBU6A THRU GBU6M

