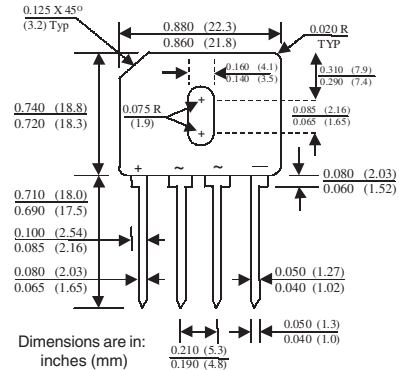


## GBU8A - GBU8K

### Features

- Surge overload rating: 200 amperes peak.
- Reliable low cost construction utilizing molded plastic technique.
- Ideal for printed circuit board.



### 8.0 Ampere Bridge Rectifiers

#### Absolute Maximum Ratings\*

$T_A = 25^\circ\text{C}$  unless otherwise noted

| Symbol                | Parameter   | Value       | Units                     |
|-----------------------|---|-------------|---------------------------|
| $I_o$                 | Average Rectified Current<br>@ $T_A = 100^\circ\text{C}$<br>@ $T_A = 45^\circ\text{C}$                  | 8.0<br>6.0  | A<br>A                    |
| $i_{f(\text{surge})}$ | Peak Forward Surge Current<br>8.3 ms single half-sine-wave<br>Superimposed on rated load (JEDEC method) | 200         | A                         |
| $P_D$                 | Total Device Dissipation<br>Derate above $25^\circ\text{C}$   | 6.9<br>55   | W<br>mW/ $^\circ\text{C}$ |
| $R_{JA}$              | Thermal Resistance, Junction to Ambient,** per leg  | 18          | $^\circ\text{C}/\text{W}$ |
| $T_{\text{stg}}$      | Storage Temperature Range   | -55 to +150 | $^\circ\text{C}$          |
| $T_J$                 | Operating Junction Temperature  | -55 to +150 | $^\circ\text{C}$          |

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

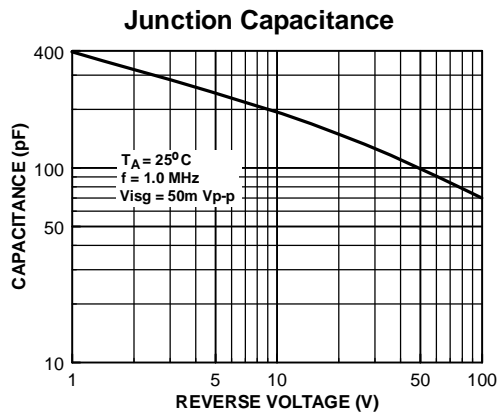
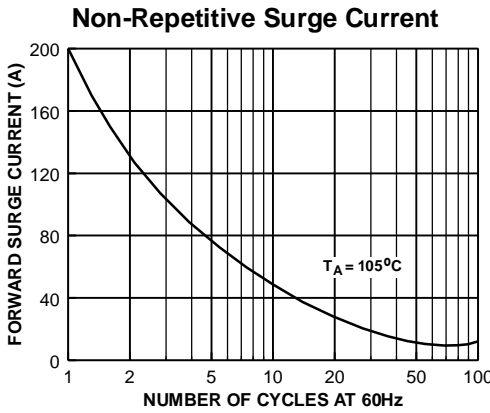
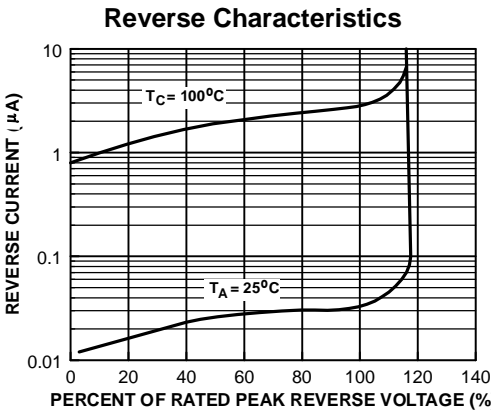
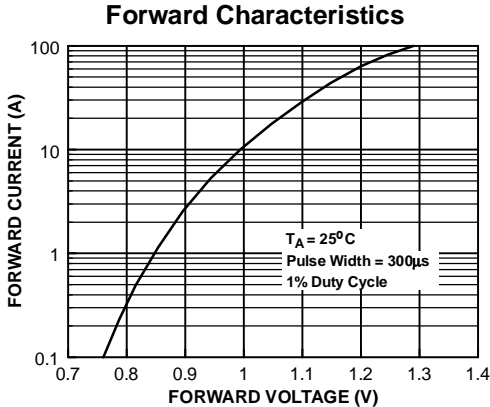
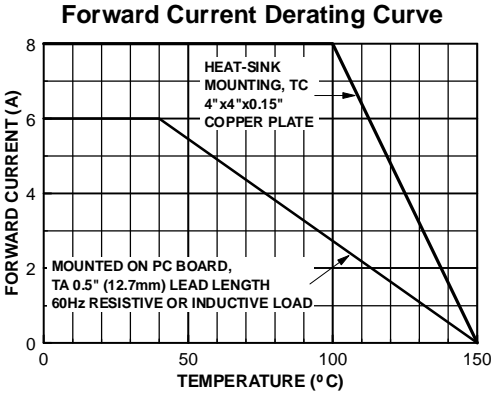
\*\*Device mounted on PCB with 0.5 x 0.5" (12 x 12 mm).

#### Electrical Characteristics

$T_A = 25^\circ\text{C}$  unless otherwise noted

| Parameter  | Device     |     |     |     |     |     | Units              |
|--|------------|-----|-----|-----|-----|-----|--------------------|
|  | 8A         | 8B  | 8D  | 8G  | 8J  | 8K  |                    |
| Peak Repetitive Reverse Voltage  | 50         | 100 | 200 | 400 | 600 | 800 | V                  |
| Maximum RMS Input Voltage  | 35         | 70  | 140 | 280 | 420 | 560 | V                  |
| DC Reverse Voltage (Rated $V_R$ )  | 50         | 100 | 200 | 400 | 600 | 800 | V                  |
| Maximum Reverse Leakage, per element<br>@ rated $V_R$<br>$T_A = 25^\circ\text{C}$<br>$T_A = 100^\circ\text{C}$ | 5.0<br>500 |     |     |     |     |     | A<br>A             |
| Maximum Forward Voltage Drop, per element<br>@ 8.0 A   | 1.0        |     |     |     |     |     | V                  |
| $I^2t$ rating for fusing<br>$t < 8.35$ ms  | 166        |     |     |     |     |     | A <sup>2</sup> Sec |

Typical Characteristics



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| FACT Quiet Series™   | Quiet Series™ |
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