



Inline bridge

## Silicon-Bridge Rectifiers

### GBU 4A ... GBU 4M

Forward Current: 4 A

Reverse Voltage: 50 to 1000 V

Publish Data

### Features

- max. solder temperature 260°C, max. 5s
- UL recognized, file no. E63532
- Standard packing: bulk
- $V_{ISO} > 2500 \text{ V}$

### Mechanical Data

- Plastic case 20,8 x 3,3 x 18 mm
- Weight approx. 4 g
- Terminals: plated terminals solderable per IEC 68-2-20
- Mounting position: any
- Admissible torque for mounting (M3): 1(+/-10%) Nm

| Type   | Alternating input voltage<br>$V_{RMS}$<br>V | Repetitive peak reverse voltage<br>$V_{RRM}$<br>V |
|--------|---|---|
| GBU 4A | 35  | 50  |
| GBU 4B | 70  | 100   |
| GBU 4D | 140   | 200   |
| GBU 4G | 280   | 400   |
| GBU 4J | 420   | 600   |
| GBU 4K | 560   | 800   |
| GBU 4M | 700   | 1000  |

| Absolute Maximum Ratings $T_c = 25^\circ\text{C}$ unless otherwise specified |  |                |                  |
|--|--|----------------|------------------|
| Symbol   | Conditions   | Values         | Units            |
| $I_{FRM}$  | Repetitive peak forward current; $f > 15 \text{ Hz}^{1)}$                    | 30             | A                |
| $I^2t$   | Rating for fusing, $t < 10 \text{ ms}$                                       | 166            | A <sup>2</sup> s |
| $I_{FSM}$  | Peak forward surge current, 50 Hz half sine-wave<br>$T_A = 25^\circ\text{C}$ | 200            | A                |
| $I_{FAV}$  | Max. averaged fwd. current, R-load, $T_A = 50^\circ\text{C}^{1)}$            | 2,8            | A                |
| $I_{FAV}$  | Max. averaged fwd. current, C-load, $T_A = 50^\circ\text{C}^{1)}$            | 2,2            | A                |
| $I_{FAV}$  | Max. current with cooling fin, R-load, $T_c = 100^\circ\text{C}^{2)}$        | 4              | A                |
| $I_{FAV}$  | Max. current with cooling fin, C-load, $T_c = 100^\circ\text{C}^{2)}$        | 3,2            | A                |
| $R_{thA}$  | Thermal resistance junction to ambient <sup>1)</sup>                         | /              | K/W              |
| $R_{thC}$  | Thermal resistance junction to case <sup>1)</sup>                            | 3,3            | K/W              |
| $T_j$  | Operating junction temperature   | - 50 ... + 150 | °C               |
| $T_s$  | Storage temperature  | - 50 ... + 150 | °C               |

| Characteristics $T_c = 25^\circ\text{C}$ unless otherwise specified |   |        |       |
|---|---|--------|-------|
| Symbol  | Conditions  | Values | Units |
| $V_F$   | Maximum forward. voltage,<br>$T_j = 25^\circ\text{C}$ ; $I_F = 4 \text{ A}$ | 1      | V     |
| $I_R$   | Maximum Leakage current,<br>$T_j = 25^\circ\text{C}$ ; $V_R = V_{RRM}$      | 10     | μA    |
| $C_j$   | Typical junction capacitance per leg at V, MHz                              |        | pF    |



