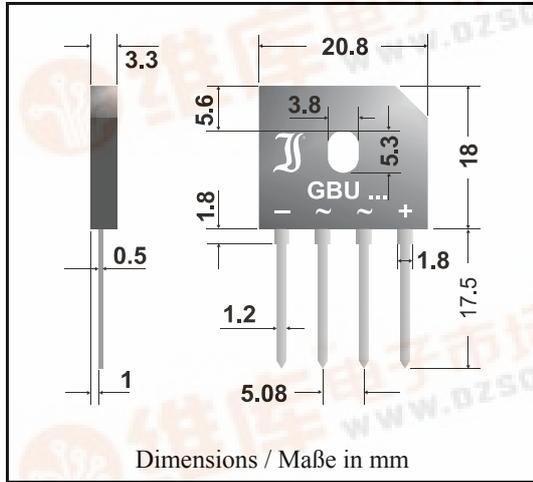


Silicon-Bridge Rectifiers

Silizium-Brückengleichrichter



| | |
|---|----------------------------|
| Nominal current – Nennstrom | 6 A |
| Alternating input voltage Eingangswchelspannung | 35...700 V |
| Plastic case Kunststoffgehäuse | 20.8 x 3.3 x 18 [mm] |
| Weight approx. – Gewicht ca. | 3.8 g |
| Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert | |
| Standard packaging: bulk Standard Lieferform: lose im Karton | see page 22 s. Seite 22 |



Recognized Product – Underwriters Laboratories Inc.® File E175067
 Anerkanntes Produkt – Underwriters Laboratories Inc.® Nr. E175067

Maximum ratings

Grenzwerte

| Type Typ | max. alternating input voltage max. Eingangswchelspannung V_{VRMS} [V] | Repetitive peak reverse voltage Periodische Spitzensperspannung V_{RRM} [V] ¹⁾ |
|-------------|--|---|
| GBU 6A | 35 | 50 |
| GBU 6B | 70 | 100 |
| GBU 6D | 140 | 200 |
| GBU 6G | 280 | 400 |
| GBU 6J | 420 | 600 |
| GBU 6K | 560 | 800 |
| GBU 6M | 700 | 1000 |

| | | | |
|--|--------------------------|-----------|-----------------------------|
| Repetitive peak fwd. current – Period. Spitzenstrom | $f > 15$ Hz | I_{FRM} | 40 A ²⁾ |
| Peak forward surge current, 60 Hz half sine-wave Stoßstrom für eine 60 Hz Sinus-Halbwelle | $T_A = 25^\circ\text{C}$ | I_{FSM} | 250 A |
| Rating for fusing – Grenzlastintegral, $t < 10$ ms | $T_A = 25^\circ\text{C}$ | i^2t | 260 A ² s |
| Operating junction temperature – Sperrschichttemperatur | | T_j | - 50...+150°C |
| Storage temperature – Lagerungstemperatur | | T_s | - 50...+150°C |
| Admissible torque for mounting Zulässiges Anzugsdrehmoment | M 4 | | 9 ± 10% lb.in 1 ± 10% Nm |

¹⁾ Valid for one branch – Gültig für einen Brückenweig

²⁾ Valid, if leads are kept at ambient temperature at a distance of 10 mm from case

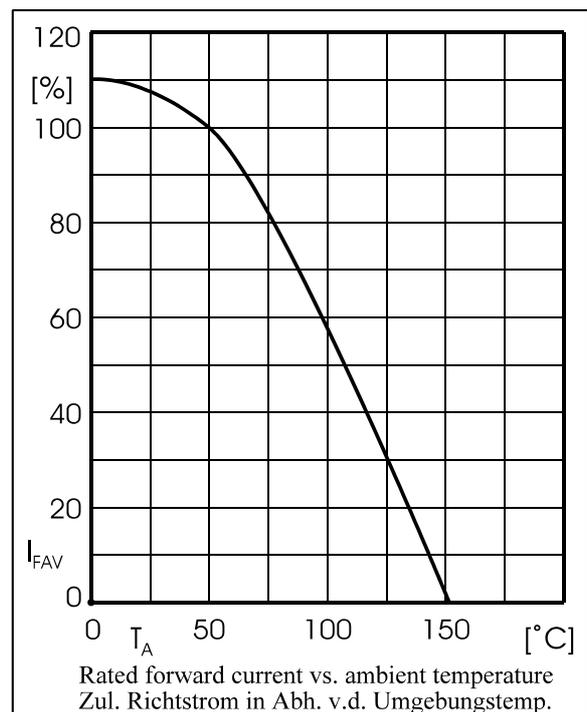
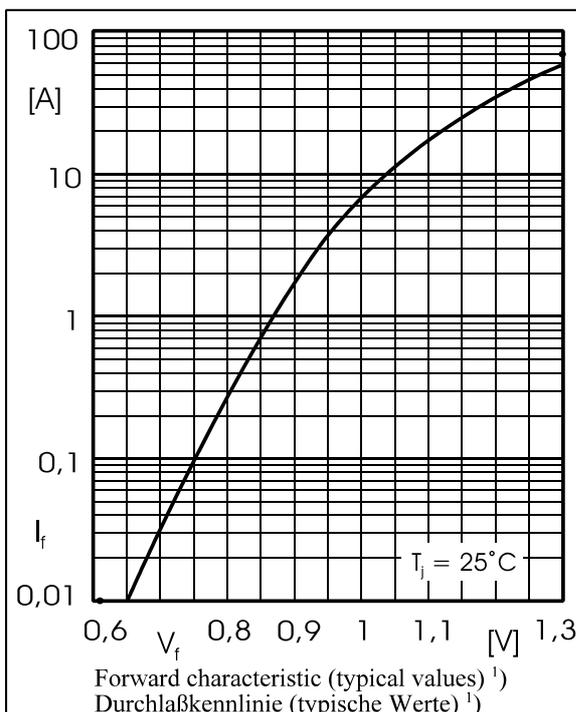
Gültig, wenn die Anschlußdrähte in 10 mm Abstand vom Gehäuse auf Umgebungstemperatur gehalten werden



Characteristics
Kennwerte

| | | | | |
|--|--------------------------|------------------------|--------------------------------------|-----------------------|
| Max. fwd. current without cooling fin Dauergrenzstrom ohne Kühlblech | $T_A = 50^\circ\text{C}$ | R-load C-load | I_{FAV} I_{FAV} | 4.2 A 3.4 A |
| Max. current with cooling fin 300 cm ² Dauergrenzstrom mit Kühlblech 300 cm ² | $T_A = 50^\circ\text{C}$ | R-load C-load | I_{FAV} I_{FAV} | 6.0 A 4.8 A |
| Forward voltage – Durchlaßspannung | $T_j = 25^\circ\text{C}$ | $I_F = 6\text{ A}$ | V_F | < 1.0 V ¹⁾ |
| Leakage current – Sperrstrom | $T_j = 25^\circ\text{C}$ | $V_R = V_{\text{RRM}}$ | I_R | < 10 μA |
| Thermal resistance junction to case Wärmewiderstand Sperrschicht – Gehäuse | | | R_{thC} | < 3.3 K/W |

| Type Typ | Max. admissible load capacitor Max. zulässiger Ladekondensator C_L [μF] | Min. required protective resistor Min. erforderl. Schutzwiderstand R_t [Ω] |
|-------------|--|---|
| GBU 6A | 20000 | 0.25 |
| GBU 6B | 10000 | 0.5 |
| GBU 6D | 5000 | 1.0 |
| GBU 6G | 2500 | 2.0 |
| GBU 6J | 1500 | 3.0 |
| GBU 6K | 1000 | 4.0 |
| GBU 6M | 800 | 5.5 |


¹⁾ Valid for one branch – Gültig für einen Brückenzweig