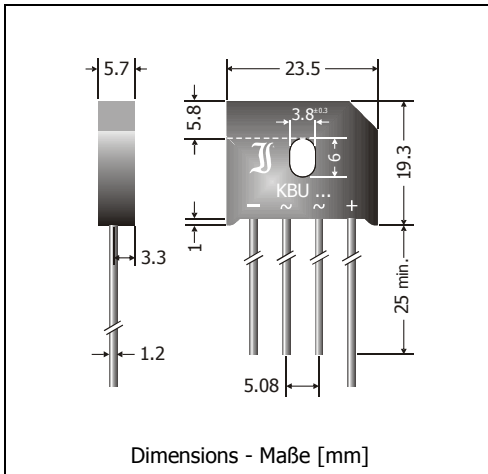


KBU4A ... KBU4M

Silicon-Bridge-Rectifiers Silizium-Brückengleichrichter

Version 2010-04-29



| | |
|---|------------------------|
| Nominal current Nennstrom | 4 A |
| Alternating input voltage Eingangswchelspannung | 35...700 V |
| Plastic case Kunststoffgehäuse | 23.5 x 5.7 x 19.3 [mm] |
| Weight approx. Gewicht ca. | 7 g |
| Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert | |
| Standard packaging bulk Standard Lieferform lose im Karton | |



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⁾ |
|-------------|--|---|
| KBU4A | 35 | 50 |
| KBU4B | 70 | 100 |
| KBU4D | 140 | 200 |
| KBU4G | 280 | 400 |
| KBU4J | 420 | 600 |
| KBU4K | 560 | 800 |
| KBU4M | 700 | 1000 |

| | | | |
|--|--------------------------|----------------|------------------------------|
| Repetitive peak forward current Periodischer Spitzenstrom | $f > 15$ Hz | I_{FRM} | 30 A ¹⁾ |
| Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwelle | $T_A = 25^\circ\text{C}$ | I_{FSM} | 180/200 A |
| Rating for fusing, $t < 10$ ms Grenzlastintegral, $t < 10$ ms | $T_A = 25^\circ\text{C}$ | i^2t | 166 A ² s |
| Operating junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur | | T_j T_s | -50...+150°C -50...+150°C |
| Admissible torque for mounting Zulässiges Anzugsdrehmoment | | M3.5 | 9 ± 10% lb.in. 1 ± 10% Nm |

¹ Valid per diode – Gültig pro Diode

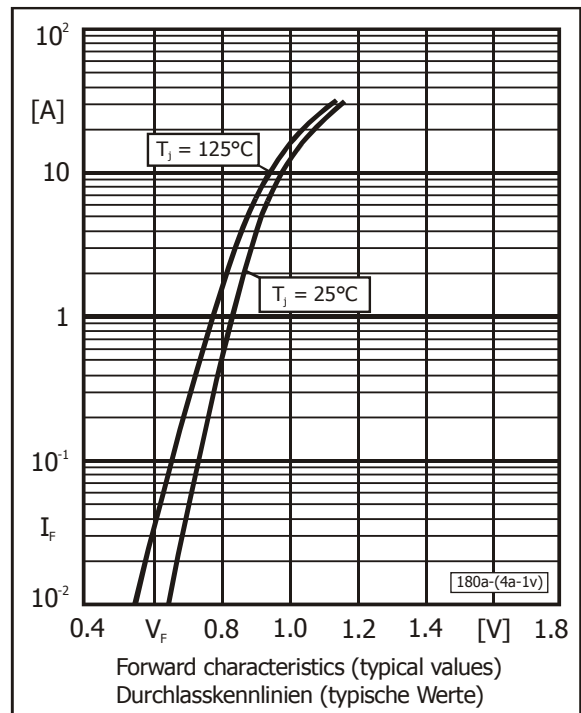
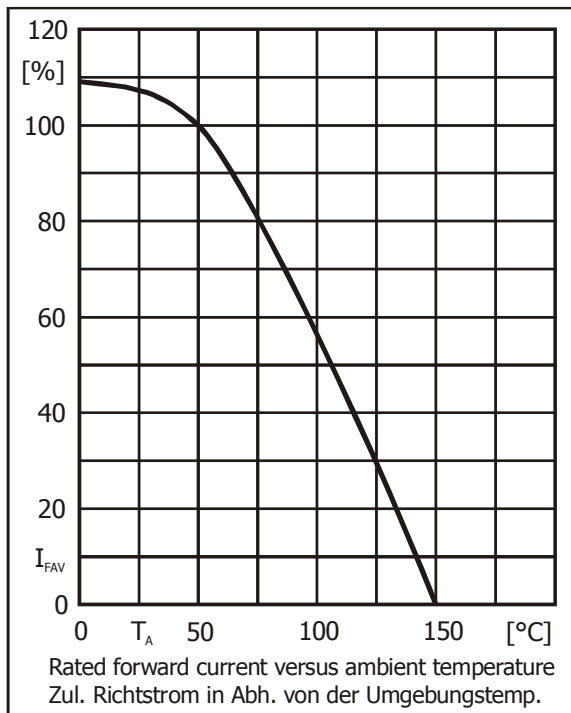
¹ Valid, if leads are kept at ambient temperature $T_A = 50^\circ\text{C}$ at a distance of 5 mm from case
Gültig, wenn die Anschlussdrähte in 5 mm vom Gehäuse auf Umgebungstemperatur $T_A = 50^\circ\text{C}$ gehalten werden

Characteristics

Kennwerte

| | | | | |
|--|--------------------------|--------------------|------------------------|--|
| Max. rectified current without cooling fin Dauergrenzstrom ohne Kühlblech | $T_A = 50^\circ\text{C}$ | R-load C-load | I_{FAV} I_{FAV} | $2.8\text{ A}^1)$ $2.2\text{ A}^1)$ |
| Max. rectified 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} | 4.0 A 3.2 A |
| Forward voltage – Durchlass-Spannung | $T_j = 25^\circ\text{C}$ | $I_F = 4\text{ A}$ | V_F | $< 1.0\text{ V}^2)$ |
| Leakage current – Sperrstrom | $T_j = 25^\circ\text{C}$ | $V_R = V_{RRM}$ | I_R | $< 10\ \mu\text{A}$ |
| Thermal resistance junction to case Wärmewiderstand Sperrschicht – Gehäuse | | | R_{thc} | $< 3.3\text{ K/W}$ |

| Type Typ | Max. admissible load capacitor Max. zulässiger Ladekondensator C_L [μF] | Min. required protective resistor Min. erforderl. Schutzwiderstand R_t [Ω] |
|-------------|--|---|
| KBU4A | 20000 | 0.25 |
| KBU4B | 10000 | 0.5 |
| KBU4D | 5000 | 1.0 |
| KBU4G | 2500 | 2.0 |
| KBU4J | 1500 | 4.0 |
| KBU4K | 1000 | 5.0 |
| KBU4M | 800 | 6.5 |



1 Valid, if leads are kept at ambient temperature $T_A = 50^\circ\text{C}$ at a distance of 5 mm from case
Gültig, wenn die Anschlussdrähte in 5 mm vom Gehäuse auf Umgebungstemperatur $T_A = 50^\circ\text{C}$ gehalten werden
2 Valid per diode – Gültig pro Diode