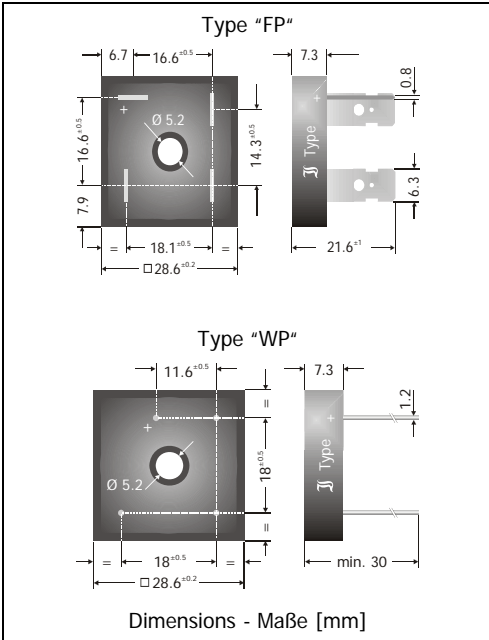


KBPC2500F ... KBPC2516F, KBPC2500W ... KBPC2516W
Silicon-Bridge-Rectifiers
Silizium-Brückengleichrichter

Version 2006-12-09



Nominal current 25 A
 Nennstrom
 Alternating input voltage 35...1000 V
 Eingangswechselspannung
 Plastic case with alu bottom Index "P"
 Plastikgehäuse mit Alu-Boden
 Dimensions 28.6 x 28.6 x 7.3 [mm]
 Abmessungen
 Weight approx. 17 g
 Gewicht ca.
 Compound has classification UL94V-0
 Vergussmasse nach 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. Eingangswechselspannung V_{VRMS} [V] | Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V] ¹⁾ |
|-------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| KBPC2500F/W | 35 | 50 |
| KBPC2501F/W | 70 | 100 |
| KBPC2502F/W | 140 | 200 |
| KBPC2504F/W | 280 | 400 |
| KBPC2506F/W | 420 | 600 |
| KBPC2508F/W | 560 | 800 |
| KBPC2510F/W | 700 | 1000 |
| KBPC2512F/W | 800 | 1200 |
| KBPC2514F/W | 900 | 1400 |
| KBPC2516F/W | 1000 | 1600 |

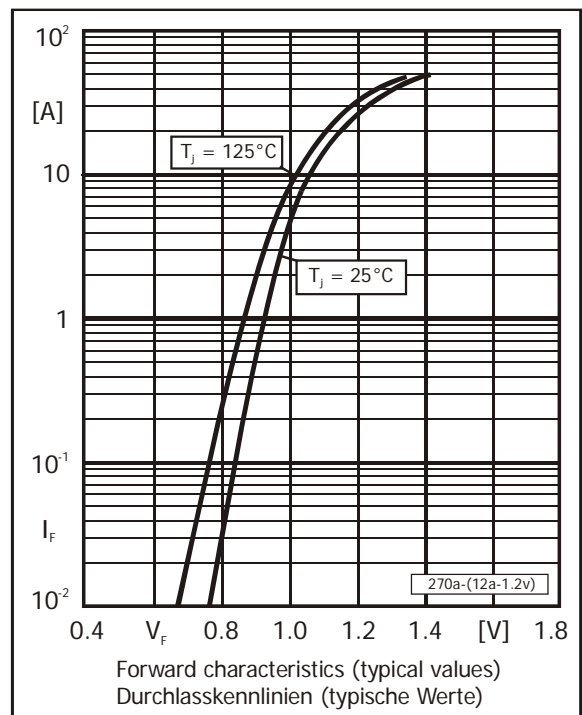
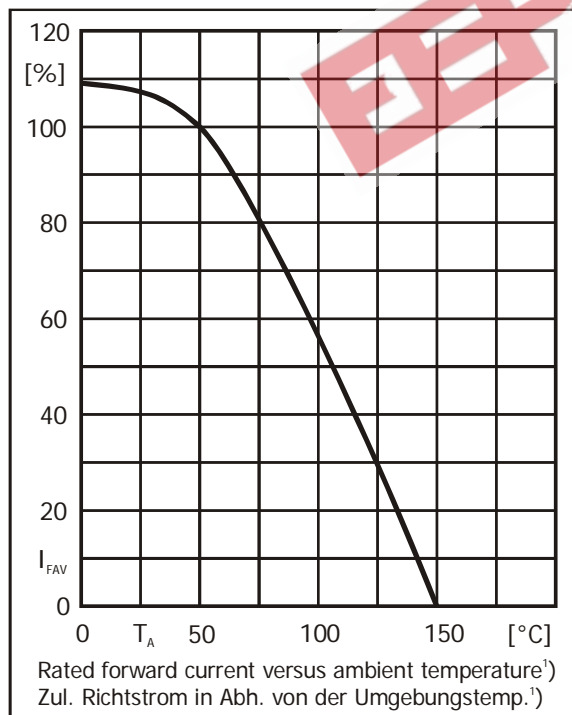
1 Valid per diode – Gültig pro Diode

Maximum ratings
Grenzwerte

| | | | |
|------------------------------------------------------------------------------------------------------|--------------------------|----------------|------------------------------|
| Repetitive peak forward current Periodischer Spitzenstrom | $f > 15 \text{ Hz}$ | I_{FRM} | 60 A ¹⁾ |
| Peak forward surge current 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwellen | $T_A = 25^\circ\text{C}$ | I_{FSM} | 270/300 A |
| Rating for fusing, $t < 10 \text{ ms}$ Grenzlastintegral, $t < 10 \text{ ms}$ | $T_A = 25^\circ\text{C}$ | i^2t | 375 A ² s |
| Operating junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur | | T_J T_S | -50...+150°C -50...+150°C |

Characteristics
Kenwerte

| | | | | |
|--------------------------------------------------------------------------------------------------------|--------------------------|------------------------|------------------------|-------------------------------|
| 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} | 25 A 20 A |
| Forward voltage – Durchlass-Spannung | $T_J = 25^\circ\text{C}$ | $I_F = 12.5 \text{ A}$ | V_F | < 1.2 V ²⁾ |
| Leakage current – Sperrstrom | $T_J = 25^\circ\text{C}$ | $V_R = V_{RRM}$ | I_R | < 25 µA |
| Isolation voltage terminals to case Isolationsspannung Anschlüsse zum Gehäuse | | | V_{ISO} | > 2500 V |
| Thermal resistance junction to case Wärmewiderstand Sperrschicht – Gehäuse | | | R_{thc} | < 2.0 K/W |
| Admissible torque for mounting Zulässiges Anzugsdrehmoment | | 10-32 UNF M5 | | 18 ± 10% lb.in. 2 ± 10% Nm |



1 Valid, if the temperature of the case is kept to $T_C = 120^\circ\text{C}$ – Gültig, wenn die Gehäusetemperatur auf $T_C = 120^\circ\text{C}$ gehalten wird

2 Valid for one branch – Gültig für einen Brückenweig