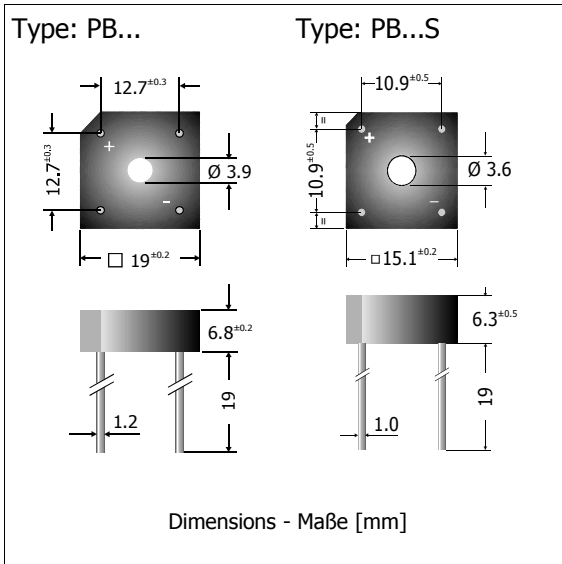


PB1000 ... PB1010, PB1000S ... PB1010S
**Silicon-Bridge-Rectifiers
Silizium-Brückengleichrichter**

Version 2012-10-09



| | |
|---|------------------------|
| Nominal current – Nennstrom | 10 A |
| Alternating input voltage Eingangswchelspannung | 35...700 V |
| Type: PB... | 19 x 19 x 6.8 [mm] |
| Plastic case – Kunststoffgehäuse | 5.5 g |
| Weight approx. – Gewicht ca. | |
| Type: PB...S | 15.1 x 15.1 x 6.3 [mm] |
| Plastic case with Al-bottom – Kunststoffgehäuse mit Alu-Boden | 3.5 g |
| Weight approx. – Gewicht ca. | |
| 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 Spitzensperrspannung V_{RRM} [V] ¹⁾ |
|------------------|--|--|
| PB1000 / PB1000S | 35 | 50 |
| PB1001 / PB1001S | 70 | 100 |
| PB1002 / PB1002S | 140 | 200 |
| PB1004 / PB1004S | 280 | 400 |
| PB1006 / PB1006S | 420 | 600 |
| PB1008 / PB1008S | 560 | 800 |
| PB1010 / PB1010S | 700 | 1000 |

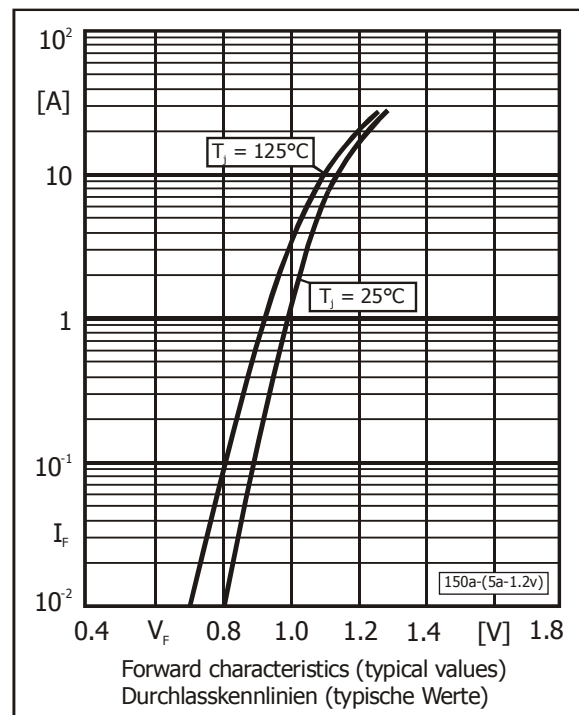
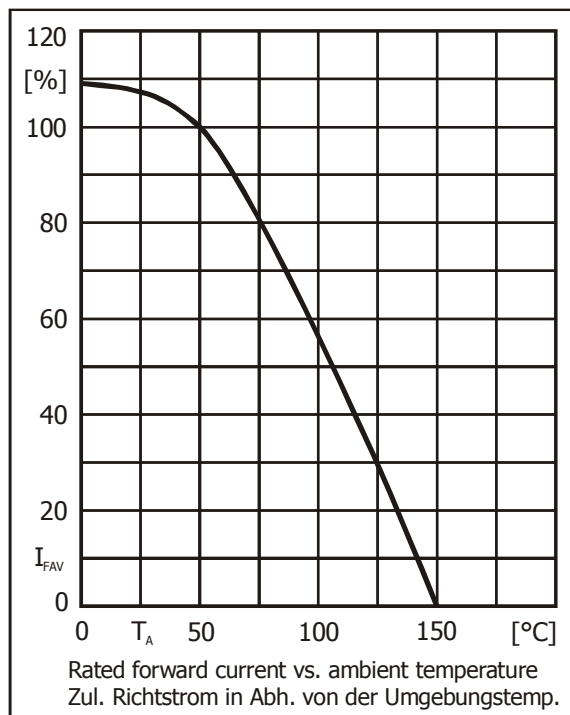
| | | | |
|--|--------------------------|----------------|------------------------------|
| Repetitive peak forward current Periodischer Spitzenstrom | $f > 15$ Hz | I_{FRM} | 50 A ²⁾ |
| Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwelle | $T_A = 25^\circ\text{C}$ | I_{FSM} | 135/150 A ¹⁾ |
| Rating for fusing, $t < 10$ ms Grenzlastintegral, $t < 10$ ms | $T_A = 25^\circ\text{C}$ | i^2t | 93 A ² s |
| Operating junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur | | T_j T_s | -50...+150°C -50...+150°C |

1 Per diode – Pro Diode

2 Valid, if leads are kept at ambient temperature at a distance of 5 mm from case
Gültig, wenn die Anschlussdrähte in 5 mm Abstand vom Gehäuse auf Umgebungstemperatur gehalten werden

Characteristics
Kennwerte

| | | | | |
|--|-----------------------|-----------------------------------|------------------|-----------------------------|
| Max. current with cooling fin 300 cm ² Dauergrenzstrom mit Kühlblech 300 cm ² | T _A = 50°C | R-load C-load | I _{FAV} | 10.0 A 8.0 A |
| Forward voltage Durchlass-Spannung | T _j = 25°C | I _F = 5 A | V _F | < 1.2 V ¹⁾ |
| Leakage current Sperrstrom | T _j = 25°C | V _R = V _{RRM} | I _R | < 5 μA |
| Isolation voltage terminals to case Isolationsspannung Anschlüsse zum Gehäuse | | | V _{ISO} | > 2500 V |
| Thermal Resistance Junction – Case Wärmewiderstand Sperrschicht – Gehäuse | | | R _{thC} | < 3.3 K/W |
| Admissible torque for mounting Zulässiges Anzugsdrehmoment | | M 4 | | 9 ± 10% lb.in 1 ± 10% Nm |



1 Per diode – Pro Diode