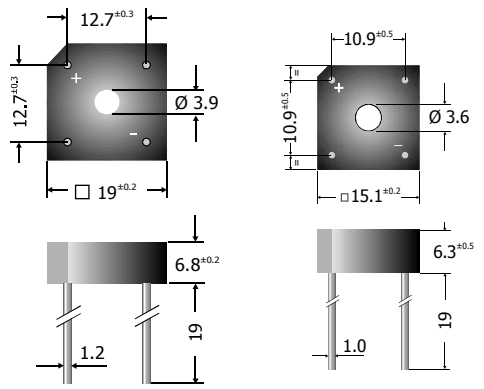
PB1000 ... PB1010, PB1000S ... PB1010S

Silicon-Bridge-Rectifiers
Silizium-Brückengleichrichter

Version 2011-03-22

Type: PB... Type: PB...S



Dimensions - Maße [mm]

Nominal current – Nennstrom	10 A
Alternating input voltage Eingangswechselspannung	35...700 V
Type: PB... 19 x 19 x 6.8 [mm]	
Plastic case – Kunststoffgehäuse Weight approx. – Gewicht ca.	5.5 g
Type: PB...S 15.1 x 15.1 x 6.3 [mm]	
Plastic case with Al-bottom – Kunststoffgehäuse mit Alu-Boden Weight approx. – Gewicht ca.	3.5 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

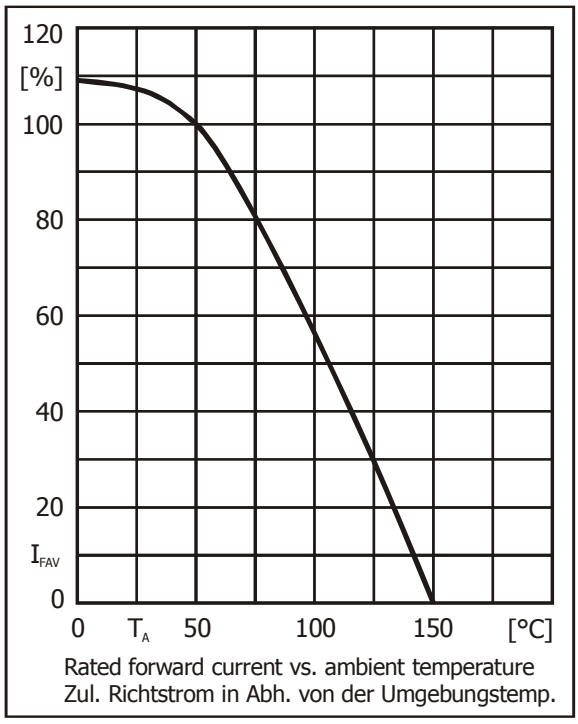
Maximum ratings **Grenzwerte**

Type Typ	Max. alternating input voltage Max. Eingangswechselspannung 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

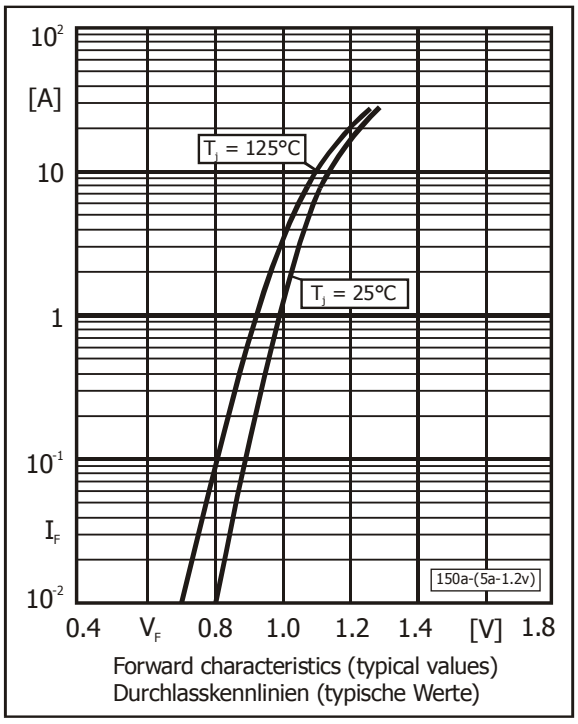
Repetitive peak forward current Periodischer Spitzenstrom	f > 15 Hz	I_{FRM}	50 A [2]
Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwelle	T_A = 25°C	I_{FSM}	135/150 A [1]
Rating for fusing, t < 10 ms Grenzlastintegral, t < 10 ms	T_A = 25°C	i^2t	93 A^2s
Operating 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 cm² Dauergrenzstrom mit Kühlblech 300 cm²	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	< 10 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	



Rated forward current vs. ambient temperature
Zul. Richtstrom in Abh. von der Umgebungstemp.



Forward characteristics (typical values)
Durchlasskennlinien (typische Werte)

1 Per diode – Pro Diode

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