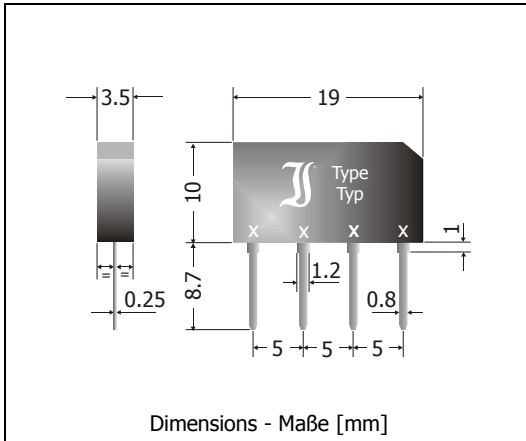


## B...C2300-1500A/B

### Silicon-Bridge-Rectifiers Silizium-Brückengleichrichter

Version 2012-10-02



|   |                    |
|---|--------------------|
| Nominal current<br>Nennstrom  | 2.3 / 1.5 A        |
| Alternating input voltage<br>Eingangswchselspannung                                   | 40...500 V         |
| Plastic case<br>Kunststoffgehäuse   | 19 x 3.5 x 10 [mm] |
| Weight approx. – Gewicht ca.  | 1.3 g              |
| Plastic material has UL classification 94V-0<br>Gehäusematerial UL94V-0 klassifiziert |                    |
| Standard packaging bulk<br>Standard Lieferform lose im Karton                         |                    |



Suffix "A" for pinning / für Anschlussfolge [x x x x] = [+ ~ ~ -]  
 Suffix "B" for pinning / für Anschlussfolge [x x x x] = [~ + ~ -]



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

**Maximum ratings****Grenzwerte**

| Type<br>Typ       | Max. alternating input voltage<br>Max. Eingangswchselspannung<br>$V_{VRMS}$ [V] | Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung<br>$V_{RRM}$ [V] <sup>1)</sup> |
|-------------------|---|--|
| B40C2300-1500A/B  | 40  | 80   |
| B80C2300-1500A/B  | 80  | 160  |
| B125C2300-1500A/B | 125   | 250  |
| B250C2300-1500A/B | 250   | 600  |
| B380C2300-1500A/B | 380   | 800  |
| B500C2300-1500A/B | 500   | 1000   |

|  |                          |                |                              |
|--|--------------------------|----------------|------------------------------|
| Repetitive peak forward current<br>Periodischer Spitzenstrom   | $f > 15$ Hz              | $I_{FRM}$      | 10 A <sup>2)</sup>           |
| Peak forward surge current, 50/60 Hz half sine-wave<br>Stoßstrom für eine 50/60 Hz Sinus-Halbwellen  | $T_A = 25^\circ\text{C}$ | $I_{FSM}$      | 50/55 A                      |
| Rating for fusing, $t < 10$ ms<br>Grenzlastintegral, $t < 10$ ms                                     | $T_A = 25^\circ\text{C}$ | $i^2t$         | 12.5 A <sup>2</sup> s        |
| Operating junction temperature – Sperrschichttemperatur<br>Storage temperature – Lagerungstemperatur |                          | $T_j$<br>$T_s$ | -50...+150°C<br>-50...+150°C |

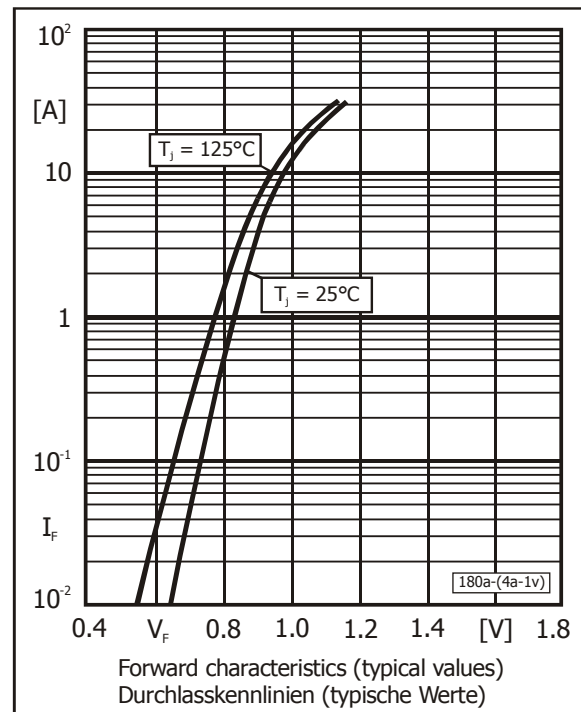
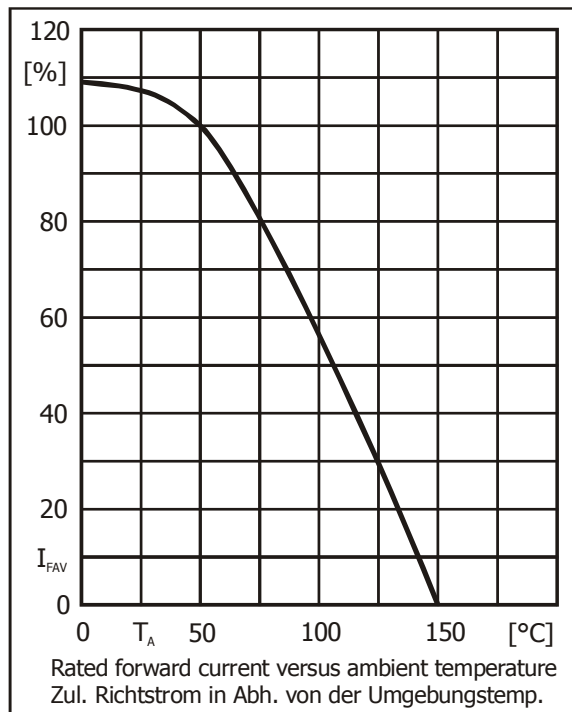
1 Per diode – Pro Diode

2 Valid, if leads are kept to 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<br>Dauergrenzstrom ohne Kühlblech                                     | $T_A = 50^\circ\text{C}$ | R-load<br>C-load | $I_{FAV}$<br>$I_{FAV}$ | 1.8 A <sup>1)</sup><br>1.5 A <sup>1)</sup> |
| Max. rectified current with cooling fin 300 cm <sup>2</sup><br>Dauergrenzstrom mit Kühlblech 300 cm <sup>2</sup> | $T_A = 50^\circ\text{C}$ | R-load<br>C-load | $I_{FAV}$<br>$I_{FAV}$ | 2.5 A<br>2.3 A                             |
| Leakage current – Sperrstrom   | $T_j = 25^\circ\text{C}$ | $V_R = V_{RRM}$  | $I_R$                  | < 5 $\mu\text{A}$                          |
| Thermal resistance junction to ambient air<br>Wärmewiderstand Sperrschicht – umgebende Luft                      |                          |                  | $R_{thA}$              | < 40 K/W                                   |

| Type<br>Typ       | Max. admissible load capacitor<br>Max. zulässiger Ladekondensator<br>$C_L$ [ $\mu\text{F}$ ] | Min. required protective resistor<br>Min. erforderl. Schutzwiderstand<br>$R_L$ [ $\Omega$ ] |
|-------------------|--|---|
| B40C2300-1500A/B  | 3100   | 1.6   |
| B80C2300-1500A/B  | 1500   | 3.2   |
| B125C2300-1500A/B | 1000   | 5.0   |
| B250C2300-1500A/B | 400  | 12.0  |
| B380C2300-1500A/B | 300  | 16.0  |
| B500C2300-1500A/B | 250  | 20.0  |



1 Valid, if leads are kept to 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