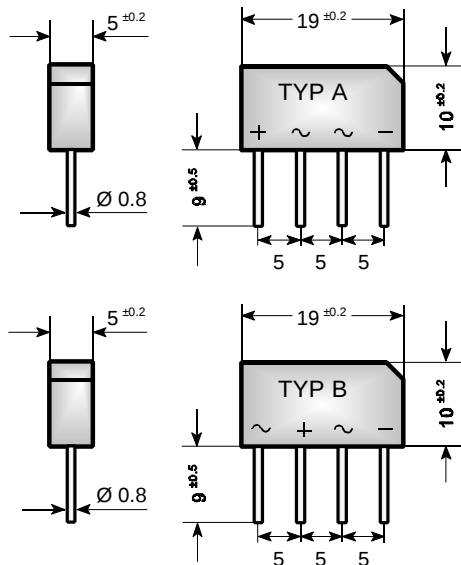


### Silicon-Bridge Rectifiers



Dimensions / Maße in mm

### Silizium-Brückengleichrichter

Nominal current  
Nennstrom 2.3 / 1.5 A

Alternating input voltage  
Eingangsschaltspannung 40...500 V

Plastic case  
Kunststoffgehäuse 19 x 5 x 10 [mm]

Weight approx.  
Gewicht ca. 1.8 g

Standard packaging: bulk  
Standard Lieferform: lose im Karton

### Maximum ratings

### Grenzwerte

| Type            | Alternating input volt. | Rep. peak reverse volt. <sup>1)</sup>  | Surge peak reverse volt. <sup>1)</sup> |
|-----------------|-------------------------|----------------------------------------|----------------------------------------|
| Typ             | Eingangsschaltspg.      | Period. Spitzensperrspg. <sup>1)</sup> | Stoßspitzensperrspanng. <sup>1)</sup>  |
|                 | V <sub>VRMS</sub> [V]   | V <sub>RRM</sub> [V]                   | V <sub>RSM</sub> [V]                   |
| B40C 2300-1500  | 40                      | 80                                     | 100                                    |
| B80C 2300-1500  | 80                      | 160                                    | 200                                    |
| B125C 2300-1500 | 125                     | 250                                    | 400                                    |
| B250C 2300-1500 | 250                     | 500                                    | 800                                    |
| B380C 2300-1500 | 380                     | 800                                    | 1000                                   |
| B500C 2300-1500 | 500                     | 1000                                   | 1200                                   |

Repetitive peak forward current  
Periodischer Spitzenstrom  $f > 15 \text{ Hz}$   $I_{FRM}$  10 A <sup>2)</sup>

Rating for fusing,  $t < 10 \text{ ms}$   
Grenzlastintegral,  $t < 10 \text{ ms}$   $T_A = 25^\circ\text{C}$   $i^2t$  12.5 A<sup>2</sup>s

Peak fwd. surge current, 50 Hz half sine-wave  
Stoßstrom für eine 50 Hz Sinus-Halbwellen  $T_A = 25^\circ\text{C}$   $I_{FSM}$  50 A

Operating junction temperature – Sperrschichttemperatur  $T_j$  – 50...+150°C  
Storage temperature – Lagerungstemperatur  $T_s$  – 50...+150°C

<sup>1)</sup> Valid for one branch – Gültig für einen Brückenweig

<sup>2)</sup> Valid, if leads are kept at ambient temperature at a distance of 5 mm from case

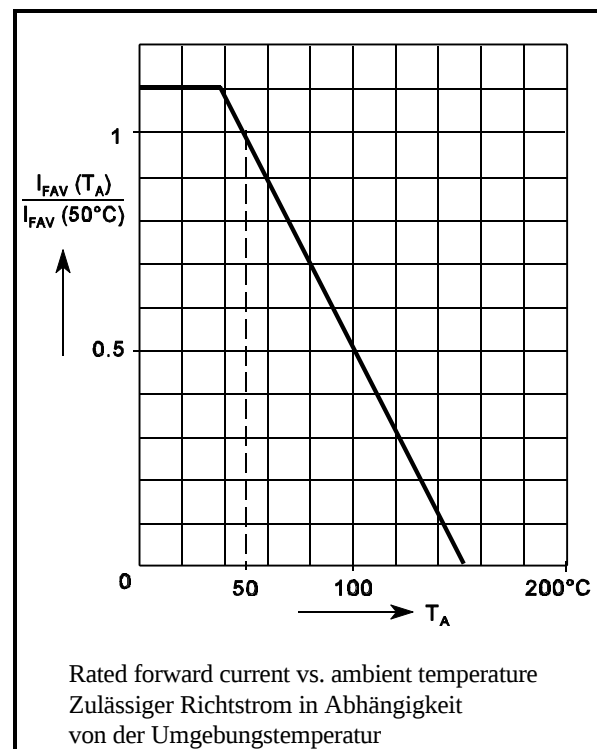
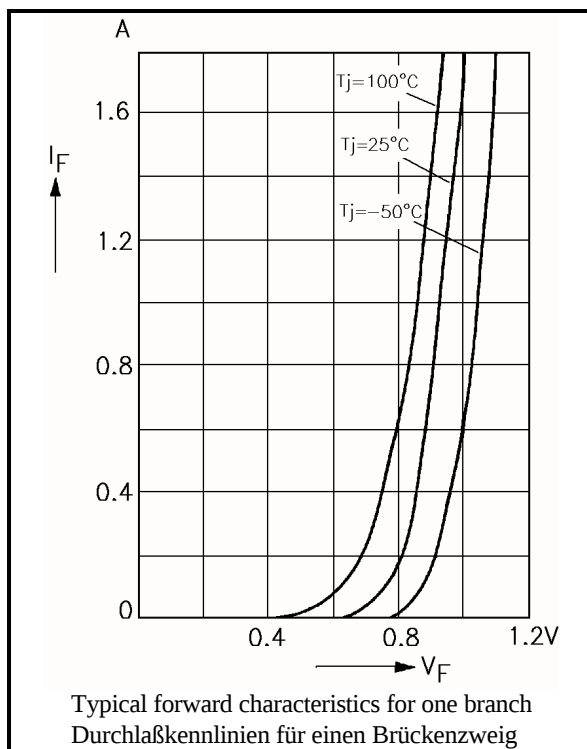
Gültig, wenn die Anschlußdrähte in 5 mm Abstand von Gehäuse auf Umgebungstemperatur gehalten werden

## Characteristics

## Kennwerte

|                                                                                                        |                          |                        |                                      |                                            |
|--------------------------------------------------------------------------------------------------------|--------------------------|------------------------|--------------------------------------|--------------------------------------------|
| Max. fwd. current without cooling fin<br>Dauergrenzstrom ohne Kühlblech                                | $T_A = 50^\circ\text{C}$ | R-load<br>C-load       | $I_{\text{FAV}}$<br>$I_{\text{FAV}}$ | 1.8 A <sup>1)</sup><br>1.5 A <sup>1)</sup> |
| Max. 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       | $I_{\text{FAV}}$<br>$I_{\text{FAV}}$ | 2.5 A<br>2.3 A                             |
| Leakage current – Sperrstrom                                                                           | $T_j = 25^\circ\text{C}$ | $V_R = V_{\text{RRM}}$ | $I_R$                                | < 10 $\mu\text{A}$                         |
| Thermal resistance junction to ambient air<br>Wärmewiderstand Sperrschicht – umgebende Luft            |                          |                        | $R_{\text{thA}}$                     | < 40 K/W <sup>1)</sup>                     |

| Type<br>Typ     | Max. admissible load capacitor<br>Max. zulässiger Ladekondensator | Min. required protective resistor<br>Min. erforderl. Schutzwiderstand |
|-----------------|-------------------------------------------------------------------|-----------------------------------------------------------------------|
|                 | $C_L$ [ $\mu\text{F}$ ]                                           | $R_t$ [ $\Omega$ ]                                                    |
| B40C 2300-1500  | 5000                                                              | 0.8                                                                   |
| B80C 2300-1500  | 2500                                                              | 1.6                                                                   |
| B125C 2300-1500 | 1500                                                              | 2.5                                                                   |
| B250C 2300-1500 | 800                                                               | 5.0                                                                   |
| B380C 2300-1500 | 600                                                               | 8.0                                                                   |
| B500C 2300-1500 | 400                                                               | 10                                                                    |



<sup>1)</sup> Valid, if leads are kept at ambient temperature at a distance of 5 mm from case

Gültig, wenn die Anschlußdrähte in 5 mm Abstand von Gehäuse auf Umgebungstemperatur gehalten werden