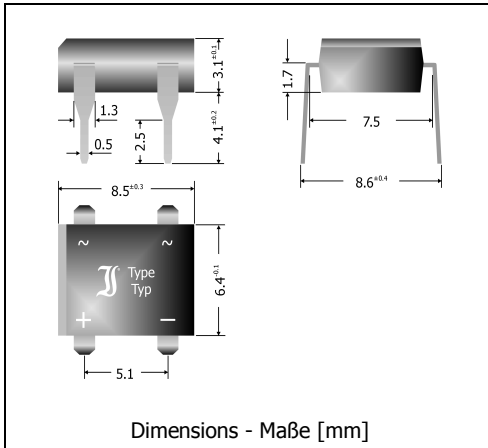



## B40D ... B500D

### Silicon-Bridge-Rectifiers Silizium-Brückengleichrichter

Version 2012-10-02



Nominal current Nennstrom	1 A
Alternating input voltage Eingangswechselspannung	40...500 V
Plastic case DIL Kunststoffgehäuse DIL	8.3 x 6.4 x 3.1 [mm]
Weight approx. – Gewicht ca.	0.4 g
Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert	
Standard packaging: plastic tubes Standard Lieferform: Plastik-Schienen	



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] <sup>1)</sup>
B40D	40	80
B80D	80	160
B125D	125	250
B250D	250	600
B380D	380	800
B500D	500	1000

Repetitive peak forward current Periodischer Spitzenstrom	$f > 15$ Hz	$I_{FRM}$	10 A <sup>2)</sup>
Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwellen	$T_A = 25^\circ\text{C}$	$I_{FSM}$	40/44 A
Rating for fusing, $t < 10$ ms Grenzlastintegral, $t < 10$ ms	$T_A = 25^\circ\text{C}$	$i^2t$	8 A <sup>2</sup> s
Operating junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur		$T_j$ $T_s$	-50...+150°C -50...+150°C

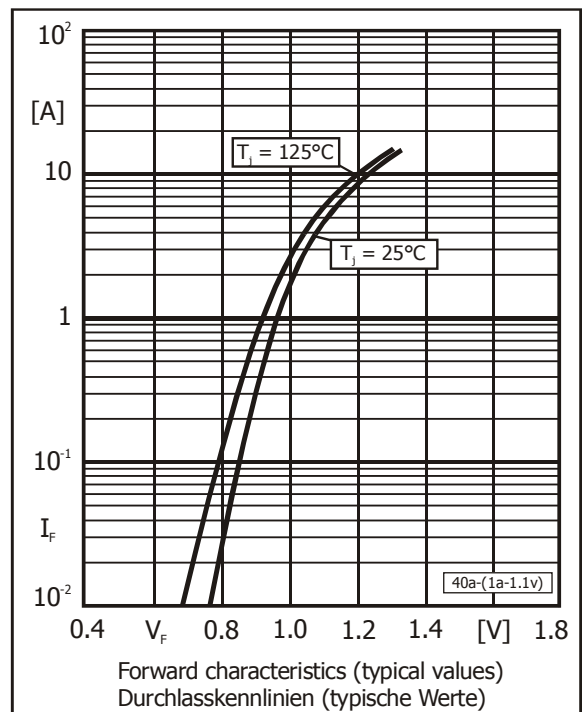
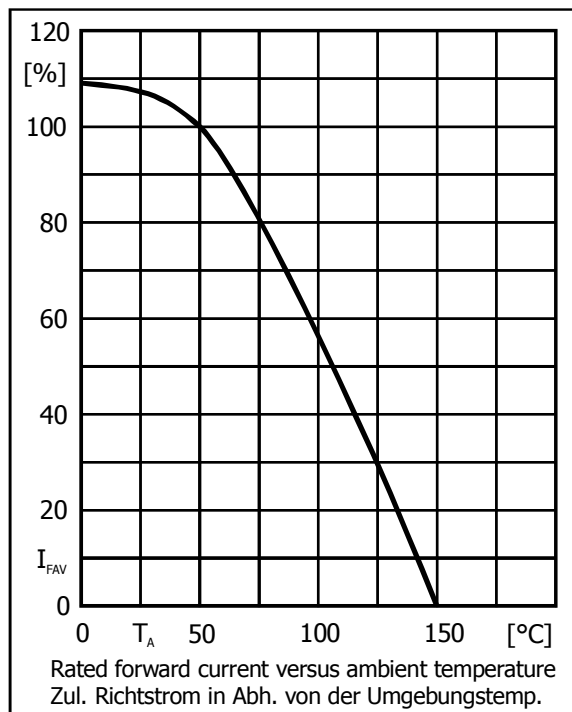
1 Valid per diode – Gültig pro Diode

2 Max. temperature of the terminals  $T_T = 100^\circ\text{C}$  – Max. Temperatur der Anschlüsse  $T_T = 100^\circ\text{C}$

**Characteristics**
**Kennwerte**

Max. average forward rectified current Dauergrenzstrom	$T_A = 50^\circ\text{C}$	R-load C-load	$I_{FAV}$ $I_{FAV}$	$1.0 \text{ A}^{1)}$ $0.8 \text{ A}^{1)}$
Forward voltage – Durchlass-Spannung	$T_j = 25^\circ\text{C}$	$I_F = 1 \text{ A}$	$V_F$	$< 1.1 \text{ V}^{2)}$
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 Wärmewiderstand Sperrschicht – umgebende Luft			$R_{thA}$	$< 60 \text{ K/W}^{1)}$

Type Typ	Max. admissible load capacitor Max. zulässiger Ladekondensator CL [ $\mu\text{F}$ ]	Min. required protective resistor Min. erforderl. Schutzwiderstand Rt [ $\Omega$ ]
B40D	2500	2.0
B80D	1250	4.0
B125D	800	6.3
B250D	333	15.0
B380D	250	20.0
B500D	200	25.0



- 1 Mounted on P.C. Board with 25 mm<sup>2</sup> copper pads at each terminal  
Montage auf Leiterplatte mit 25 mm<sup>2</sup> Kupferbelag (Löt-pad) an jedem Anschluss
- 2 Valid per diode – Gültig pro Diode