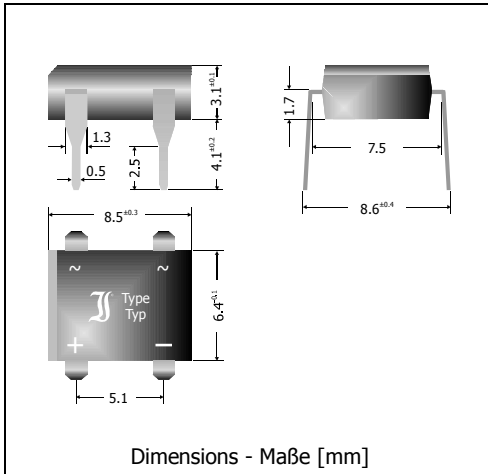


B40FD ... B380FD
Fast Switching Si-Bridge-Rectifiers
Schnelle Si-Brückengleichrichter

Version 2012-10-02



Nominal current Nennstrom	1 A
Alternating input voltage Eingangswchelsspannung	40...380 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. Eingangswchelsspannung V_{VRMS} [V]	Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V] ¹⁾
B40FD	40	80
B80FD	80	160
B125FD	125	250
B250FD	250	600
B380FD	380	800

Repetitive peak forward current Periodischer Spitzenstrom	$f > 15$ Hz	I_{FRM}	10 A ²⁾
Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwell	$T_A = 25^\circ\text{C}$	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 ² 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

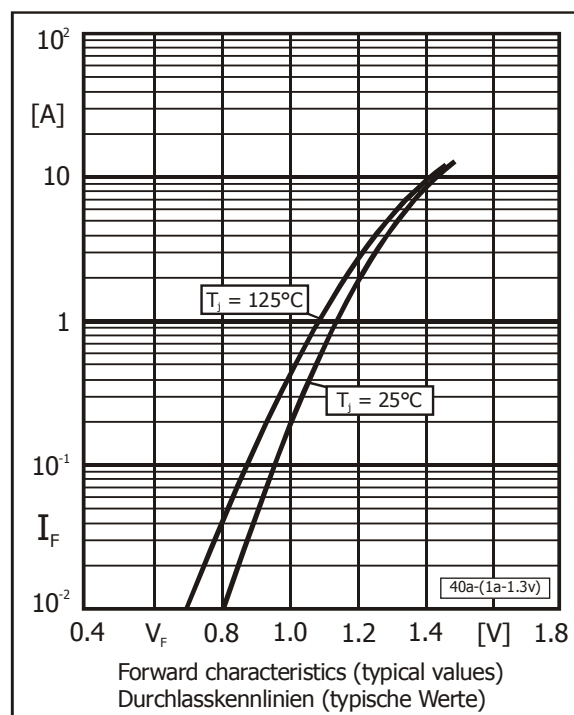
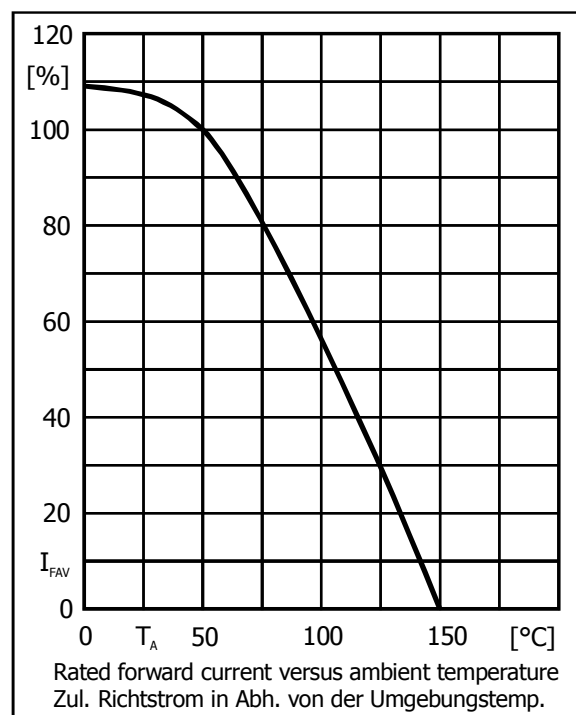
2 Max. temperature of the terminals $T_T = 100^\circ\text{C}$ – Max. Temperatur der Anschlüsse $T_T = 100^\circ\text{C}$

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	$< 1.3\text{ V}^{2)}$
Leakage current – Sperrstrom	$T_j = 25^\circ\text{C}$	$V_R = V_{RRM}$	I_R	$< 5\text{ }\mu\text{A}$
Reverse recovery time Sperrverzug	$I_F = 0.5\text{ A}$ through/über $I_R = 1\text{ A}$ to/auf $I_R = 0.25\text{ A}$		t_{rr}	$< 300\text{ ns}$
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 $CL\text{ }[\mu\text{F}]$	Min. required protective resistor Min. erforderl. Schutzwiderstand $R_t\text{ }[\Omega]$
B40FD	2500	2.0
B80FD	1250	4.0
B125FD	800	6.3
B250FD	333	15.0
B380FD	250	20.0



- 1 Mounted on P.C. Board with 25 mm² copper pads at each terminal
Montage auf Leiterplatte mit 25 mm² Kupferbelag (Lötpad) an jedem Anschluss
- 2 Valid per diode – Gültig pro Diode