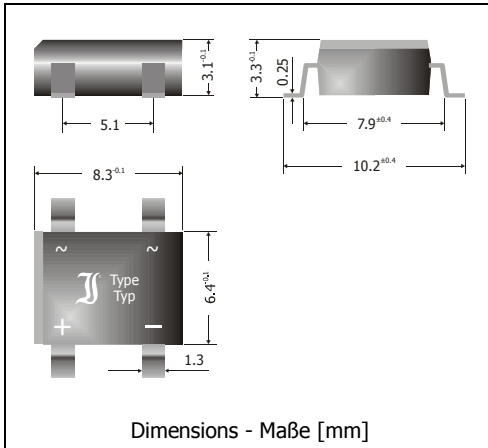


B40S ... B500S

Surface Mount Si-Bridge-Rectifiers Si-Brückengleichrichter für die Oberflächenmontage

Version 2012-10-04



Nominal current 1 A

Nennstrom

Alternating input voltage 40...500 V

Eingangswechselspannung

Plastic case SO-DIL 8.3 x 6.4 x 3.1

Kunststoffgehäuse SO-DIL

[mm]

Weight approx. – Gewicht ca. 0.4 g

Plastic material has UL classification 94V-0

Gehäusematerial UL94V-0 klassifiziert

Standard packaging taped and reeled

Standard Lieferform gegurtet auf Rolle



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 Spitzensperrensorgung V_{RRM} [V] ¹⁾
B40S	40	80
B80S	80	160
B125S	125	250
B250S	250	600
B380S	380	800
B500S	500	1000

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-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 ² s
Operating junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur		T_j T_s	-50...+150°C -50...+150°C

1 Per Diode – Pro Diode

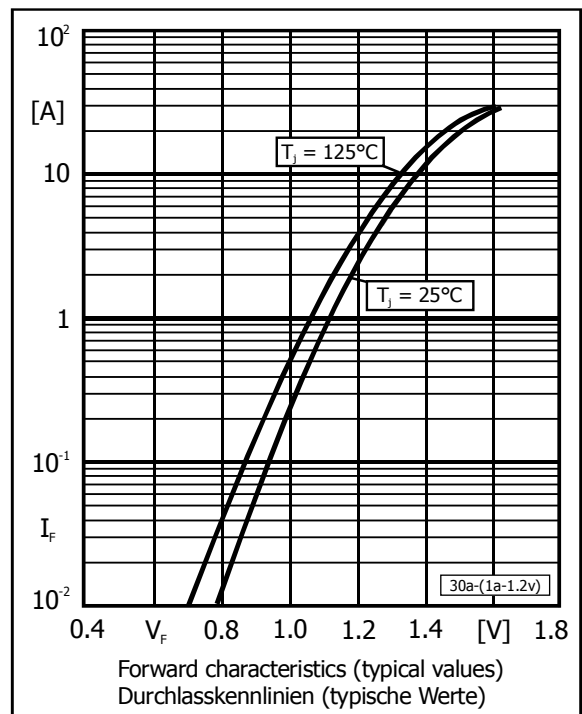
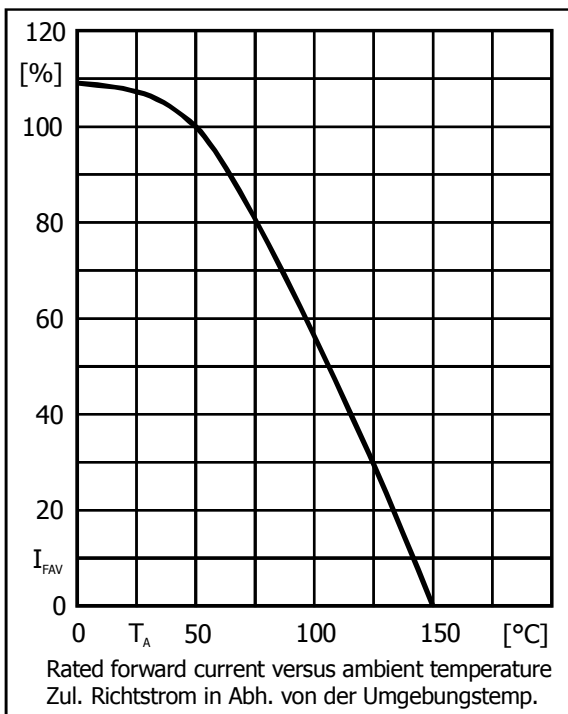
2 Max. temperature of the terminals $T_T = 100^\circ\text{C}$ – Max. Temperatur der Anschlüsse $T_T = 100^\circ\text{C}$

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 C_L [μF]	Min. required protective resistor Min. erforderl. Schutzwiderstand R_t [Ω]
B40S	2500	2.0
B80S	1250	4.0
B125S	800	6.3
B250S	333	15.0
B380S	250	20.0
B500S	200	25.0



1 Mounted on P.C. Board with 25 mm² copper pads at each terminal
Montage auf Leiterplatte mit 25 mm² Kupferbelag (Löt-pad) an jedem Anschluss
2 Per Diode – Pro Diode