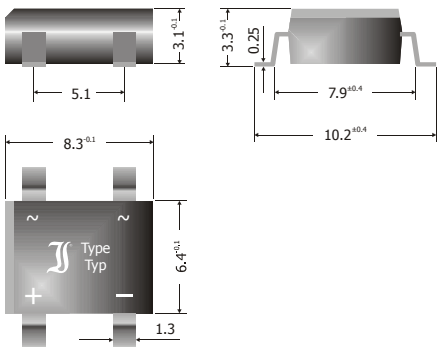
B40S ... B500S

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

Version 2006-07-12



Dimensions - Maße [mm]

Nominal current Nennstrom	1 A
Alternating input voltage Eingangswechselspannung	40...500 V
Plastic case SO-DIL Kunststoffgehäuse SO-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 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**

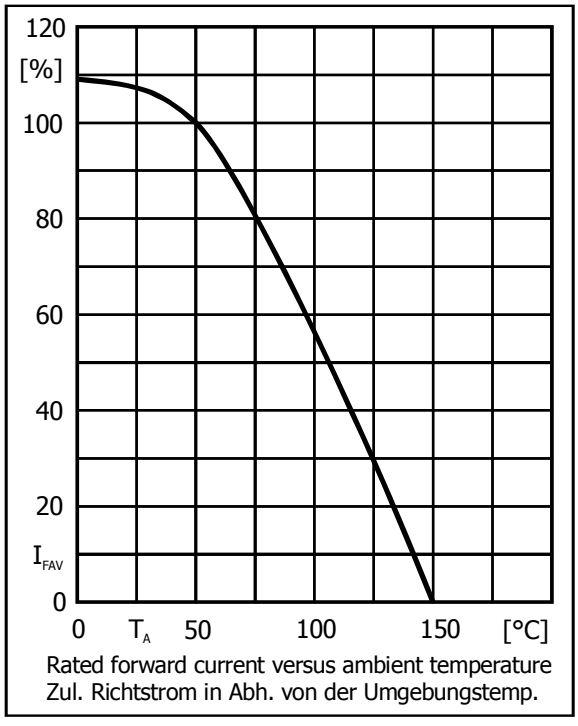
Type Typ	Max. alternating input voltage Max. Eingangswechselspannung V_{VRMS} [V]	Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V] [1])
B40S	40	80
B80S	80	160
B125S	125	250
B250S	250	600
B380S	380	800
B500S	500	1000

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-Halbwelle	T_A = 25°C	I_{FSM}	40/44 A
Rating for fusing, t < 10 ms Grenzlastintegral, t < 10 ms	T_A = 25°C	i^2t	8 A^2s
Operating junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur		T_j T_S	-50...+150°C -50...+150°C

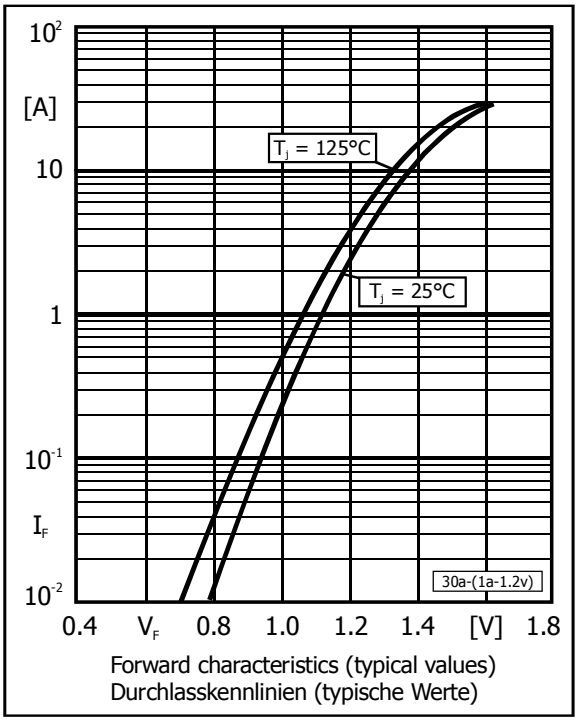
1 Per Diode – Pro Diode
2 Max. temperature of the terminals T_T = 100°C – Max. Temperatur der Anschlüsse T_T = 100°C

Characteristics				**Kennwerte**
Max. average forward rectified current Dauergrenzstrom	T_A = 50°C	R-load C-load	I_{FAV} I_{FAV}	1.0 A [1]) 0.8 A [1])
Forward voltage – Durchlass-Spannung	T_j = 25°C	I_F = 1 A	V_F	< 1.1 V [2])
Leakage current – Sperrstrom	T_j = 25°C	$V_R = V_{RRM}$	I_R	< 10 µA
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft			R_{thA}	< 60 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



Rated forward current versus ambient temperature
Zul. Richtstrom in Abh. von der Umgebungstemp.



Forward characteristics (typical values)
Durchlasskennlinien (typische Werte)

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 Per Diode – Pro Diode

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