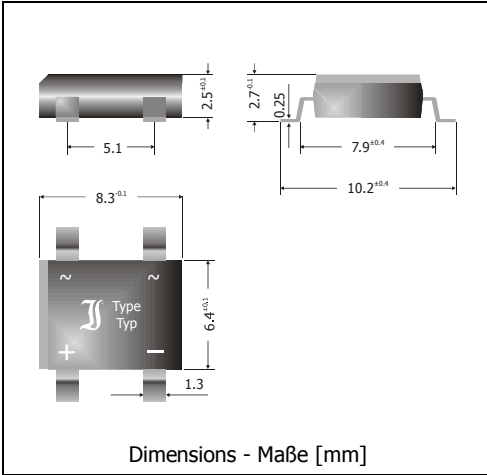


B40S15A ... B500S15A
“Slim” Profile Surface Mount Si-Bridge-Rectifiers
Si-Brückengleichrichter für die Oberflächenmontage mit „schlanker“ Bauhöhe

Version 2010-10-18



Nominal current Nennstrom	1.5 A
Alternating input voltage Eingangswchelspannung	40...500 V
Plastic case SO-DIL “SLIM” Kunststoffgehäuse SO-DIL „SLIM”	8.3 x 6.4 x 2.5 [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. Eingangswchelspannung V_{VRMS} [V]	Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V] ¹⁾
B40S15A	40	80
B80S15A	80	160
B125S15A	125	250
B250S15A	250	600
B380S15A	380	800
B500S15A	500	1000

Repetitive peak forward current Periodischer Spitzenstrom	$f > 15$ Hz	I_{FRM}	9A ²⁾
Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwelle	$T_A = 25^\circ\text{C}$	I_{FSM}	45/50 A
Rating for fusing, $t < 10$ ms Grenzlastintegral, $t < 10$ ms	$T_A = 25^\circ\text{C}$	i^2t	10.1 A ² s
Operating junction temperature – Sperrschichttemperatur		T_j	-50...+150°C
Storage temperature – Lagerungstemperatur		T_s	-50...+150°C

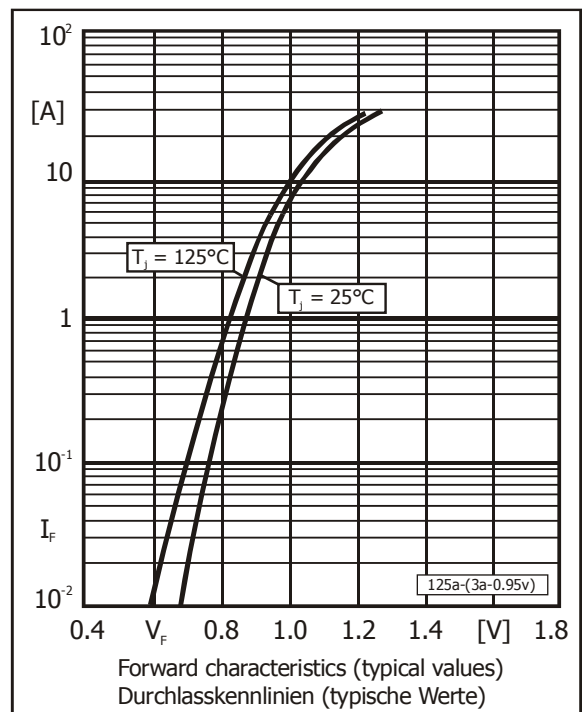
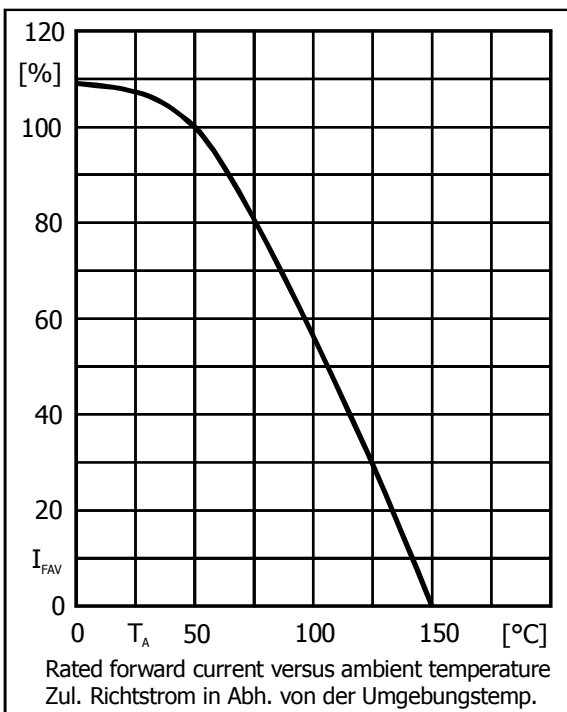
1 Per Diode – Pro Diode

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

Characteristics
Kenwerte

Max. average forward rectified current Dauergrenzstrom	$T_A = 50^\circ\text{C}$	R-load C-load	I_{FAV} I_{FAV}	$1.5\text{ A}^1)$ $1.2\text{ A}^1)$
Forward voltage – Durchlass-Spannung	$T_j = 25^\circ\text{C}$	$I_F = 1.5\text{ A}$	V_F	$< 1.1\text{ V}^2)$
Leakage current – Sperrstrom	$T_j = 25^\circ\text{C}$	$V_R = V_{RRM}$	I_R	$< 10\ \mu\text{A}$
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft			R_{thA}	$< 30\text{ K/W}^1)$

Type Typ	Max. admissible load capacitor Max. zulässiger Ladekondensator C_L [μF]	Min. required protective resistor Min. erforderl. Schutzwiderstand R_t [Ω]
B40S15A	2900	1.7
B80S15A	1400	3.5
B125S15A	900	5.5
B250S15A	350	13.3
B380S15A	280	17.7
B500S15A	220	22.2



- 1 Mounted on P.C. Board with $13 \times 13\text{ mm}^2$ copper pads at each terminal
Montage auf Leiterplatte mit $13 \times 13\text{ mm}^2$ Kupferbelag (Löt-pad) an jedem Anschluss
- 2 Per Diode – Pro Diode