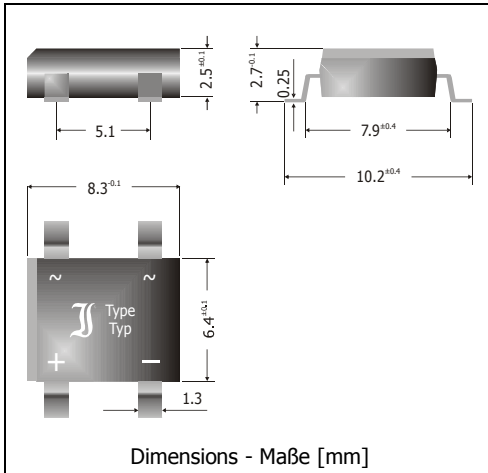


CS10S ... CS50S

"Slim" Profile Surface Mount Schottky-Bridge-Rectifiers
Schottky-Brückengleichrichter für die Oberflächenmontage mit „schlanker“ Bauhöhe

Version 2013-07-26



Nominal current Nennstrom	1 A
Alternating input voltage Eingangswechselspannung	10...50 V
Plastic case SO-DIL "SLIM" Kunststoffgehäuse SO-DIL "SLIM"	8.3 x 6.4 x 2.5 [mm]
Weight approx. – Gewicht ca.	0.1 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 and characteristics

Grenz- und Kennwerte

Type Typ	Max. alternating input voltage Max. Eingangswechselspannung V_{VRMS} [V]	Repetitive peak reverse voltage Period. Spitzensperrspannung V_{RRM} [V]	Forward voltage Durchlass-Spannung V_F [V] ^{1,2)}
CS10S	10	20	< 0.50
CS20S	20	40	< 0.50
CS30S	30	60	< 0.70
CS40S	40	80	< 0.79
CS50S	50	100	< 0.79

Repetitive peak forward current Periodischer Spitzenstrom	$f > 15$ Hz	I_{FRM}	10 A ³⁾
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

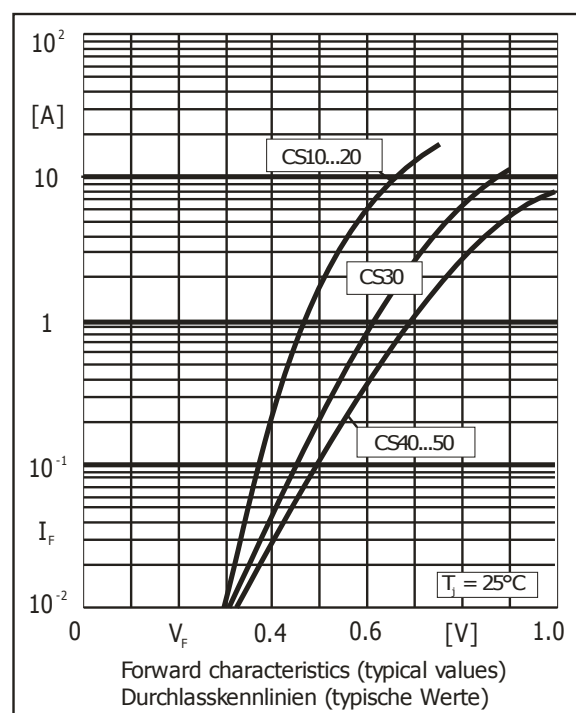
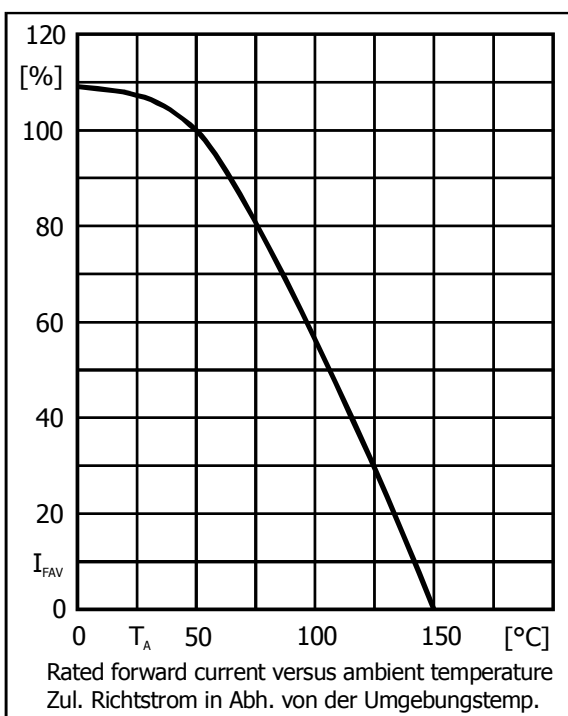
1 $I_F = 1$ A, $T_j = 25^\circ\text{C}$

2 Per Diode – Pro Diode

3 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}	$1.0\text{ A}^{1)}$ $0.8\text{ A}^{1)}$
Leakage current Sperrstrom	$T_j = 25^\circ\text{C}$ $T_j = 100^\circ\text{C}$	$V_R = V_{RRM}$ $V_R = V_{RRM}$	I_R I_R	$< 0.5\text{ mA}$ $< 5.0\text{ mA}$
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft			R_{thA}	$< 60\text{ K/W}^{1)}$



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