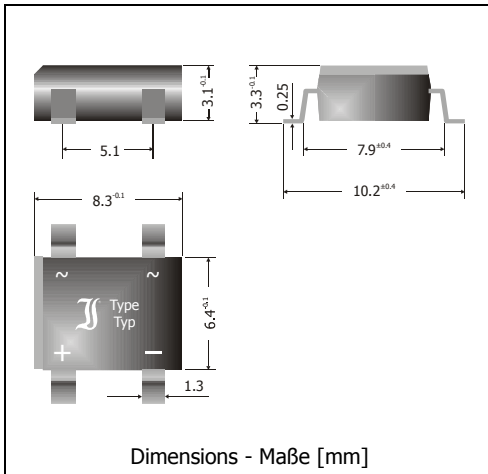



## CS10S ... CS50S

### Surface Mount Schottky-Bridge-Rectifiers Schottky-Brückengleichrichter für die Oberflächenmontage

Version 2007-12-03



Nominal current Nennstrom	1 A
Alternating input voltage Eingangswchelspannung	10...50 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 and characteristics

#### Grenz- und Kennwerte

Type Typ	Max. alternating input voltage Max. Eingangswchelspannung $V_{VRMS}$ [V]	Repetitive peak reverse voltage Period. Spitzensperrspannung $V_{RRM}$ [V]	Forward voltage Durchlass-Spannung $V_F$ [V] <sup>1,2)</sup>
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 <sup>3)</sup>
Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwelle	$T_A = 25^\circ\text{C}$	$I_{FSM}$	40/44 A
Rating for fusing, $t < 10$ ms Grenzlastintegral, $t < 10$ ms	$T_A = 25^\circ\text{C}$	$i^2t$	8 A <sup>2</sup> s
Operating junction temperature – Sperrschichttemperatur		$T_j$	-50...+150°C
Storage temperature – Lagerungstemperatur		$T_s$	-50...+150°C

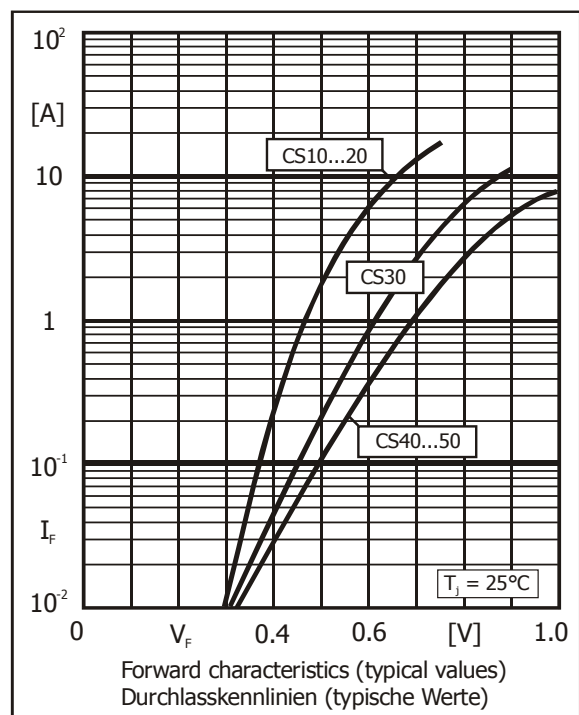
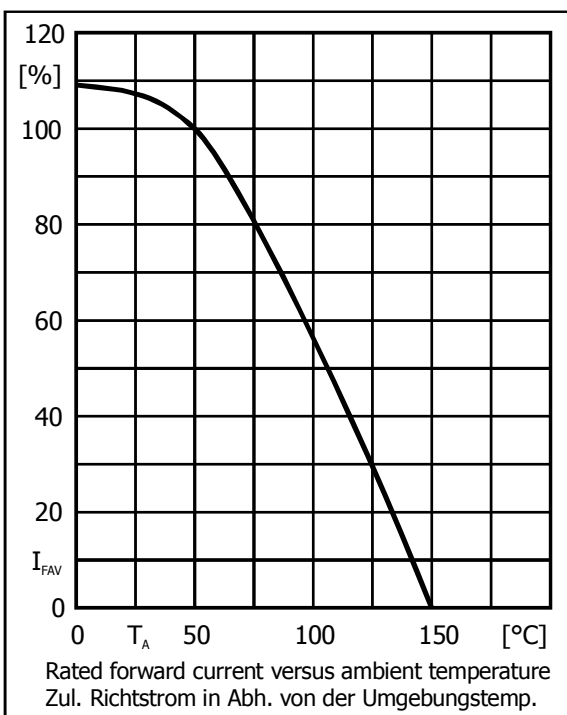
1  $I_F = 1$  A,  $T_j = 25^\circ\text{C}$

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 A <sup>1)</sup> 0.8 A <sup>1)</sup>
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 mA < 5.0 mA
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft			$R_{thA}$	< 60 K/W <sup>1)</sup>



1 Mounted on P.C. Board with 25 mm<sup>2</sup> copper pads at each terminal  
Montage auf Leiterplatte mit 25 mm<sup>2</sup> Kupferbelag (Löt-pad) an jedem Anschluss