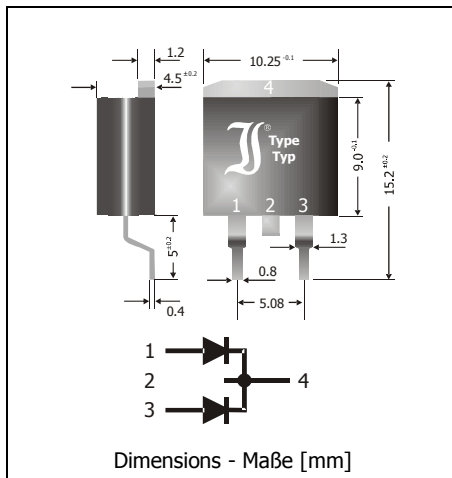


SK2020CD2 ... SK20100CD2

Surface Mount Schottky Rectifier Diodes– Common Cathode Schottky-Gleichrichterdioden für die Oberflächenmontage – Gemeinsame Kathode

Version 2010-03-29



Nominal Current Nennstrom	20 A
Repetitive peak reverse voltage Periodische Spitzensperrspannung	20...100 V
Plastic case Kunststoffgehäuse	TO-263 D2PAK
Weight approx. Gewicht ca.	1.6 g
Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert	
Standard packaging in tubes Standard Lieferform in Stangen	



Maximum ratings and Characteristics

Grenz- und Kennwerte

Type Typ	Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V]	Surge peak reverse voltage Stoßspitzensperrspannung V_{RSM} [V]	Forward Voltage Durchlass-Spannung V_F [V] ^{1) 2)}	
			$I_F = 5 A$	$I_F = 10 A$
SK2020CD2	20	20	< 0.51	< 0.55
SK2030CD2	30	30	< 0.51	< 0.55
SK2040CD2	40	40	< 0.51	< 0.55
SK2045CD2	45	45	< 0.51	< 0.55
SK2050CD2	50	50	< 0.63	< 0.70
SK2060CD2	60	60	< 0.63	< 0.70
SK2080CD2	80	80	< 0.77	< 0.85
SK20100CD2	100	100	< 0.77	< 0.85
Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschtaltung mit R-Last		$T_C = 100^\circ C$	I_{FAV} I_{FAV}	10 A ²⁾ 20 A ³⁾
Repetitive peak forward current Periodischer – Spitzenstrom		$f > 15 Hz$	I_{FRM}	30 A ²⁾
Peak forward surge current 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwellle	SK2020CD2... SK2060CD2	$T_A = 25^\circ C$	I_{FSM}	130/150 A ²⁾
	SK2080CD2... SK20100CD2	$T_A = 25^\circ C$	I_{FSM}	110/125 A ²⁾
Rating for fusing, $t < 10 ms$ – Grenzlastintegral, $t < 10 ms$		$T_A = 25^\circ C$	i^2t	80 A ² s ²⁾
Junction temperature – Sperrschichttemperatur in DC forward mode – bei Gleichstrom-Durchlassbetrieb			T_j T_j	-50...+150°C ≤ 200°C
Storage temperature – Lagerungstemperatur			T_s	-50...+175°C

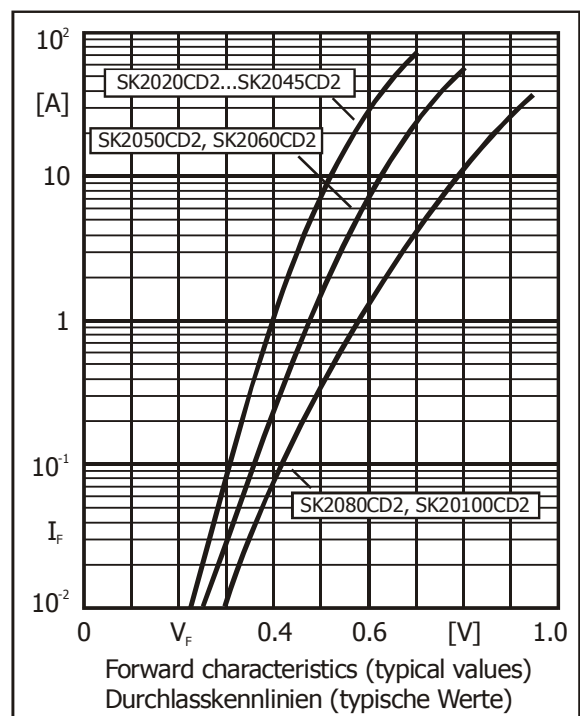
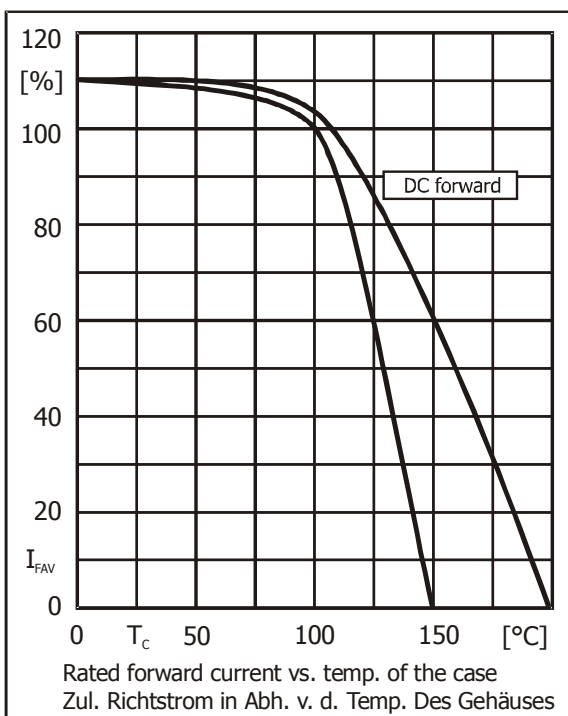
1 $T_j = 25^\circ C$

2 Per diode – Pro Diode

3 Per device (parallel operation) – Pro Bauteil (Parallelbetrieb)

Characteristics
Kennwerte

Leakage current Sperrstrom	SK2020CD2... SK2045CD2	$T_j = 25^\circ\text{C}$ $T_j = 100^\circ\text{C}$	$V_R = V_{RRM}$	I_R	< 300 μA < 45 mA
Leakage current Sperrstrom	SK2050 CD2... SK20100CD2	$T_j = 25^\circ\text{C}$ $T_j = 100^\circ\text{C}$	$V_R = V_{RRM}$	I_R	< 200 μA < 25 mA
Thermal resistance junction to case Wärmewiderstand Sperrschicht - Gehäuse				R_{thc}	< 1.5 K/W ¹⁾



1 Per device (parallel operation) – Pro Bauteil (Parallelbetrieb)