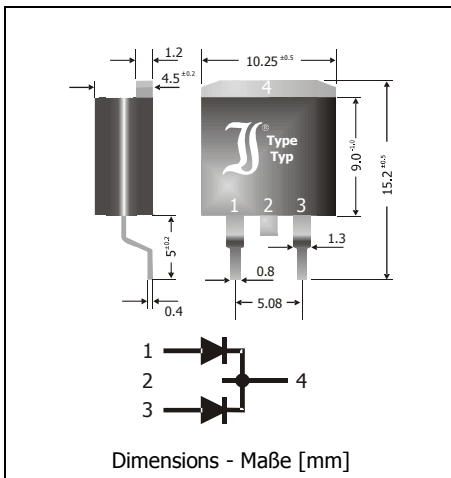


SK3020CD2 ... SK30100CD2
Surface Mount Schottky Rectifier Diodes– Common Cathode
Schottky-Gleichrichterdioden für die Oberflächenmontage – Gemeinsame Kathode

Version 2011-07-11



Nominal Current Nennstrom	30 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)}	
			$I_F = 5 A$	$I_F = 15 A$
SK3020CD2	20	20	< 0.49	< 0.55
SK3030CD2	30	30	< 0.49	< 0.55
SK3040CD2	40	40	< 0.49	< 0.55
SK3045CD2	45	45	< 0.49	< 0.55
SK3050CD2	50	50	< 0.63	< 0.70
SK3060CD2	60	60	< 0.63	< 0.70
SK3080CD2	80	80	< 0.77	< 0.85
SK30100CD2	100	100	< 0.77	< 0.85

Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last	$T_C = 100^\circ C$	I_{FAV} I_{FAV}	15 A ²⁾ 30 A ³⁾
Repetitive peak forward current – Periodischer Spitzenstrom	$f > 15 Hz$	I_{FRM}	55 A ²⁾
Peak forward surge current 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwellen	SK3020CD2... SK3060CD2 $T_A = 25^\circ C$	I_{FSM}	280/320 A ²⁾
	SK3080CD2... SK30100CD2 $T_A = 25^\circ C$	I_{FSM}	240/270 A ²⁾
Rating for fusing, $t < 10 ms$ – Grenzlastintegral, $t < 10 ms$	$T_A = 25^\circ C$	i^2t	390 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

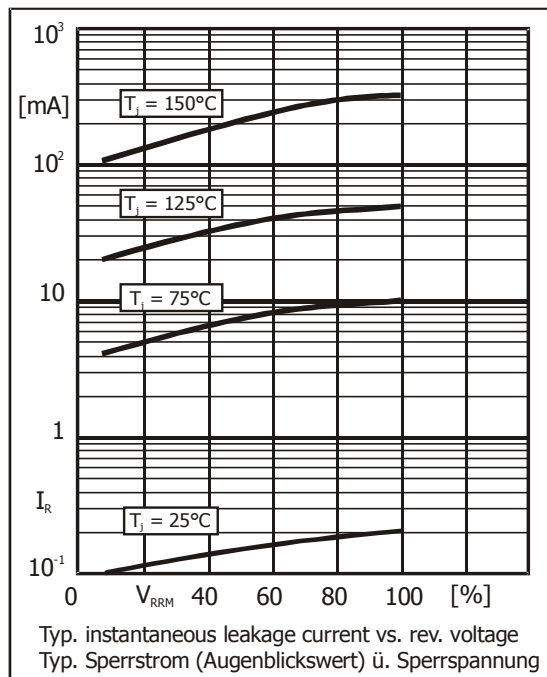
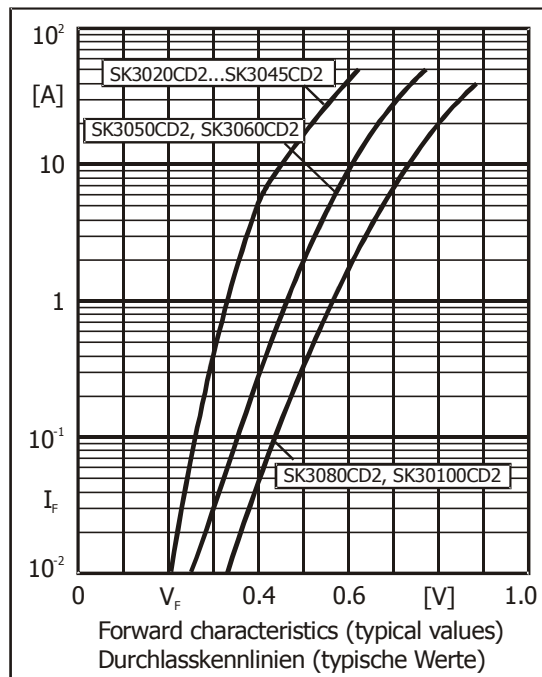
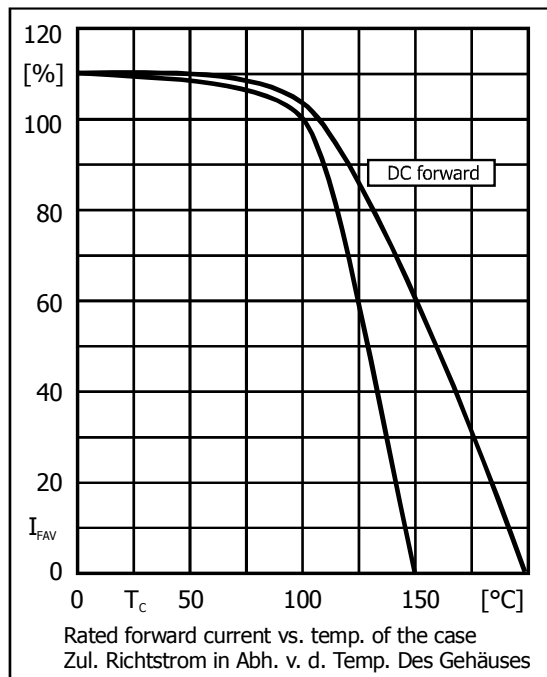
1 $T_j = 25^\circ C$

2 Per diode; data for SK3050CD2...SK30100CD2 preliminary – Pro Diode; Daten für SK3050CD2...SK30100CD2 vorläufig

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

Characteristics
Kennwerte

Leakage current Sperrstrom	$T_j = 25^\circ\text{C}$ $T_j = 100^\circ\text{C}$	$V_R = V_{RRM}$	I_R	$< 500 \mu\text{A}^1)$ $< 45 \text{ mA}^1)$
Thermal resistance junction to case Wärmewiderstand Sperrschicht - Gehäuse			R_{thC}	$< 1.5 \text{ K/W}^2)$



1 Per diode – Pro Diode

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