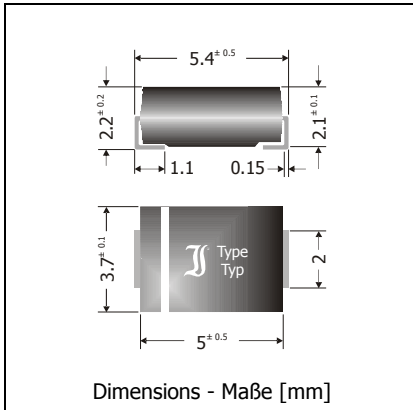


SK52 ... SK510

Surface Mount Schottky Rectifier Diodes Schottky-Gleichrichterdioden für die Oberflächenmontage

Version 2010-12-06



Nominal current – Nennstrom	5 A
Repetitive peak reverse voltage Periodische Spitzensperrspannung	20...100 V
Plastic case Kunststoffgehäuse	~ SMB ~ DO-214AA
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	



Maximum ratings

Grenzwerte

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⁾
SK52	20	20	< 0.55
SK53	30	30	< 0.55
SK54	40	40	< 0.55
SK55	50	50	< 0.68
SK56	60	60	< 0.68
SK58	80	80	< 0.83
SK510	100	100	< 0.83

Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last	SK52...SK56 SK58, SK510	I_{FAV} I_{FAV}	5 A ¹⁾ 5 A ²⁾
Repetitive peak forward current Periodischer Spitzenstrom	$f > 15$ Hz	I_{FRM}	20 A ²⁾
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}	100/110 A
Rating for fusing, $t < 10$ ms Grenzlastintegral, $t < 10$ ms	$T_A = 25^\circ\text{C}$	i^2t	50 A ² s
Operating junction temperature – Sperrschichttemperatur	T_j		-50...+150°C
Storage temperature – Lagerungstemperatur	T_s		-50...+150°C

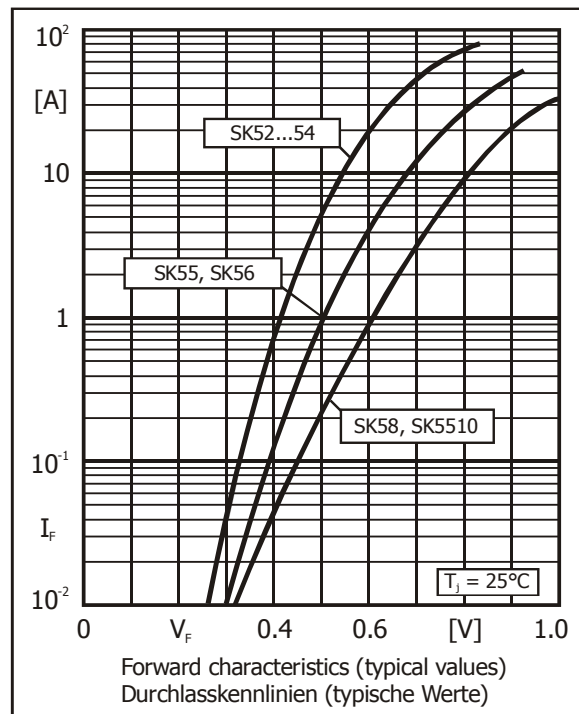
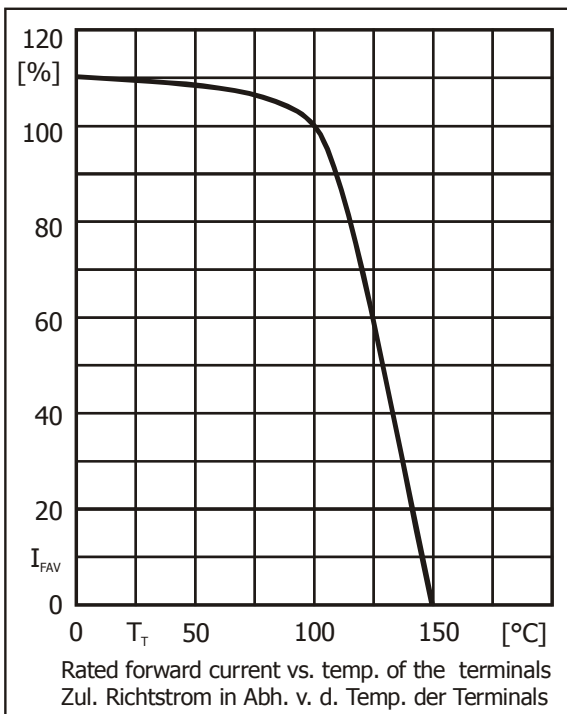
1 $I_F = 5$ A, $T_j = 25^\circ\text{C}$

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

2 Max. temperature of the terminals $T_T = 85^\circ\text{C}$ – Max. Temperatur der Anschlüsse $T_T = 85^\circ\text{C}$

Characteristics
Kennwerte

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	< 150 μA < 20 mA
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft			R_{thA}	< 45 K/W ¹⁾
Thermal resistance junction to terminal Wärmewiderstand Sperrschicht – Anschluss			R_{thT}	< 15 K/W



1 Mounted on P.C. board with 50 mm² copper pads at each terminal
Montage auf Leiterplatte mit 50 mm² Kupferbelag (Löt-pad) an jedem Anschluss