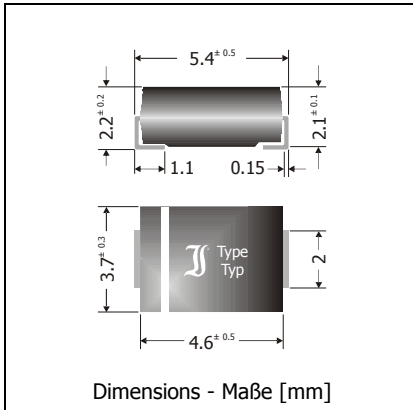



## SK52 ... SK510

### Surface Mount Schottky Rectifier Diodes Schottky-Gleichrichterdioden für die Oberflächenmontage

Version 2012-10-17



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] <sup>1)</sup>
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

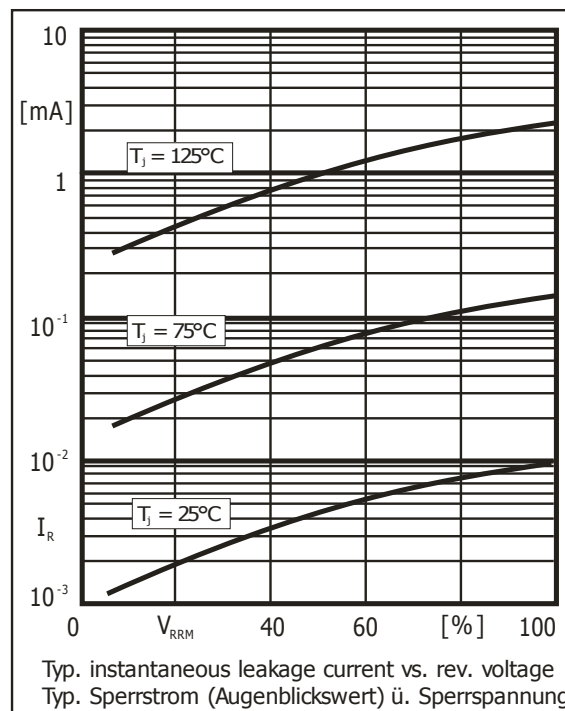
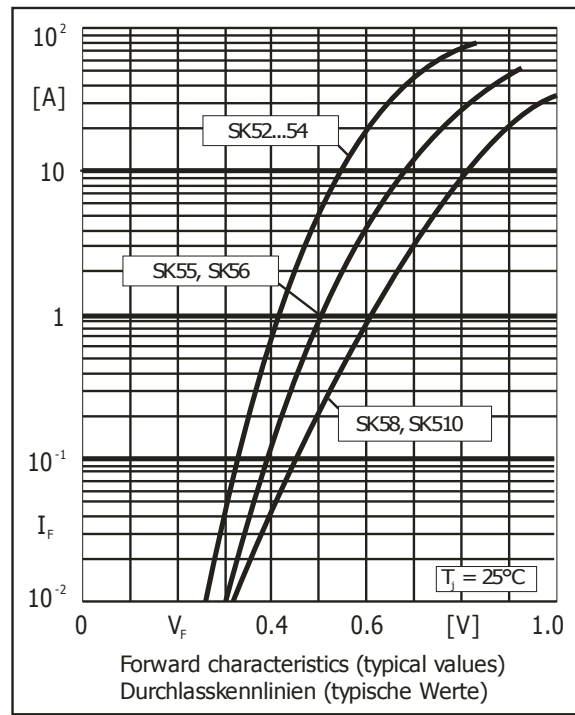
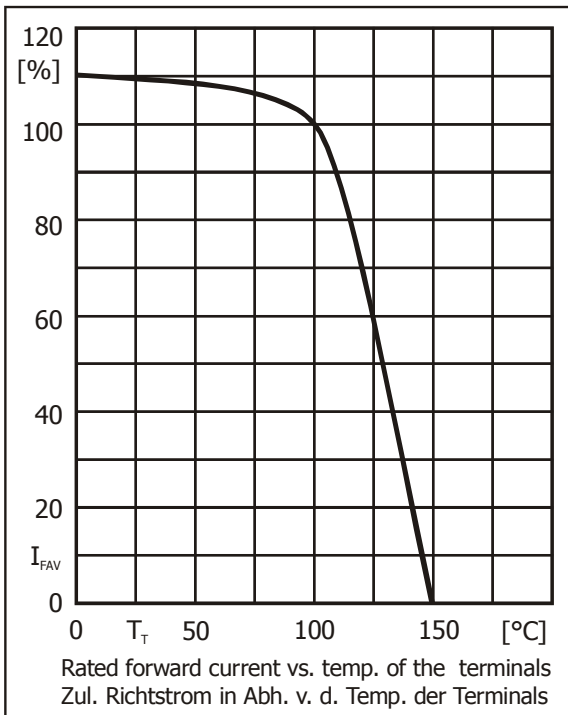
Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last	SK52...SK56 SK58, SK510	$I_{FAV}$ $I_{FAV}$	5 A <sup>2)</sup> 5 A <sup>3)</sup>
Repetitive peak forward current Periodischer Spitzenstrom	$f > 15$ Hz	$I_{FRM}$	20 A <sup>2)</sup>
Peak forward surge current, 50/60 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 <sup>2</sup> s
Operating junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur	$T_j$ $T_s$		-50...+150°C -50...+150°C

1  $I_F = 5$  A,  $T_j = 25^\circ\text{C}$ 2 Max. temperature of the terminals  $T_T = 100^\circ\text{C}$  – Max. Temperatur der Anschlüsse  $T_T = 100^\circ\text{C}$ 3 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 $\mu\text{A}$ < 20 mA
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft				$R_{thA}$ < 45 K/W <sup>1)</sup>
Thermal resistance junction to terminal Wärmewiderstand Sperrschicht – Anschluss				$R_{thT}$ < 15 K/W



1 Mounted on P.C. board with 50 mm<sup>2</sup> copper pads at each terminal  
Montage auf Leiterplatte mit 50 mm<sup>2</sup> Kupferbelag (Lötpad) an jedem Anschluss