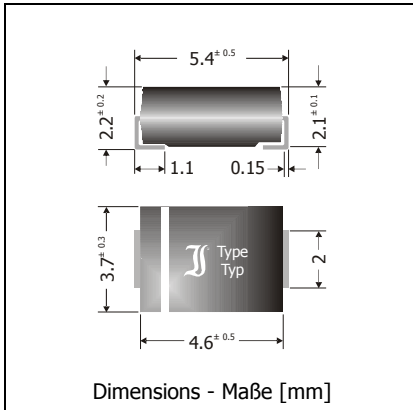


SK52 ... SK510
Surface Mount Schottky Rectifier Diodes
Schottky-Gleichrichterdioden für die Oberflächenmontage

Version 2012-10-17



Nominal current – Nennstrom

5 A

Repetitive peak reverse voltage

20...100 V

Periodische Spitzensperrspannung

Plastic case

~ SMB

Kunststoffgehäuse

~ 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

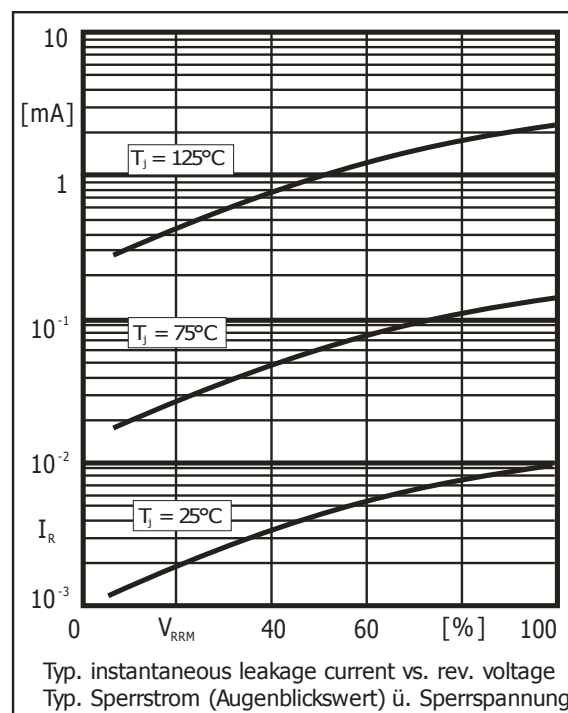
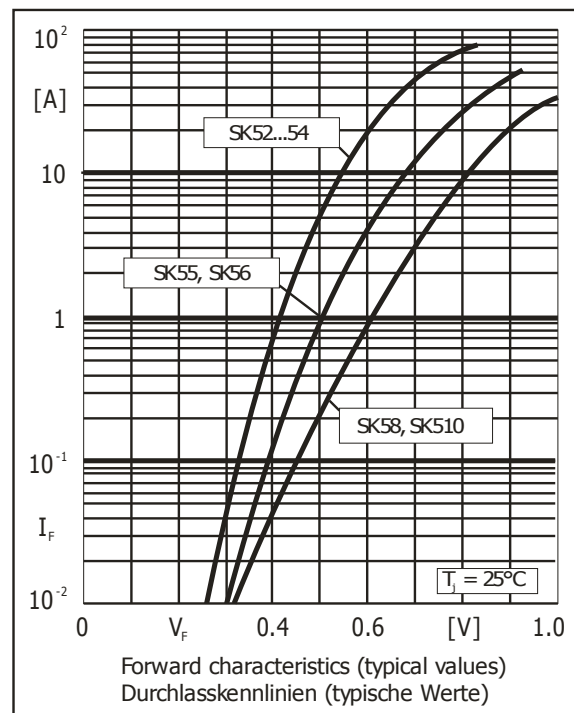
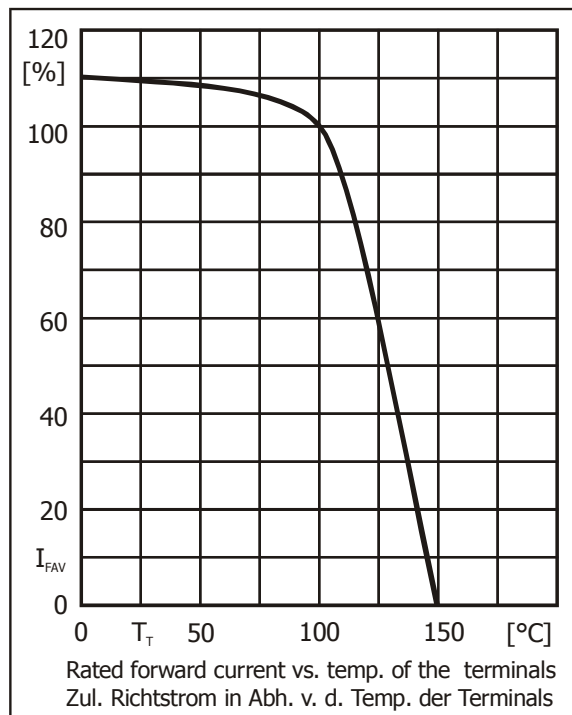
Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last	SK52...SK56 SK58, SK510	I_{FAV} I_{FAV}	5 A ²⁾ 5 A ³⁾
Repetitive peak forward current Periodischer Spitzenstrom	$f > 15$ Hz	I_{FRM}	20 A ²⁾
Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 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 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	$< 150\ \mu\text{A}$ $< 20\ \text{mA}$
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft				R_{thA} $< 45\ \text{K/W}^1)$
Thermal resistance junction to terminal Wärmewiderstand Sperrschicht – Anschluss				R_{thT} $< 15\ \text{K/W}$



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