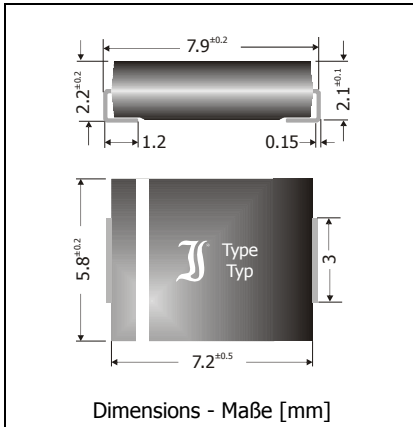


SK52SMC ... SK510SMC

Surface Mount Schottky Rectifiers Schottky-Gleichrichter für die Oberflächenmontage

Version 2014-01-21



Nominal current – Nennstrom

5 A

Repetitive peak reverse voltage

20...100 V

Periodische Spitzensperrspannung

Plastic case

~ SMC

Kunststoffgehäuse

~ DO-214AB

Weight approx. – Gewicht ca.

0.21 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 ¹⁾	Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V]	Surge peak reverse voltage Stoßspitzensperrspannung V_{RSM} [V]	Forward voltage Durchlass-Spannung V_F [V] ²⁾
SK52SMC	20	20	< 0.55
SK53SMC	30	30	< 0.55
SK54SMC	40	40	< 0.55
SK55SMC	50	50	< 0.68
SK56SMC	60	60	< 0.68
SK58SMC	80	80	< 0.83
SK510SMC	100	100	< 0.83

Max. average forward rectified current, R-load
Dauergrenzstrom in Einwegschaltung mit R-Last

$T_T = 100^\circ\text{C}$ I_{FAV} 5 A³⁾

$T_T = 85^\circ\text{C}$ I_{FAV} 5 A⁴⁾

Repetitive peak forward current
Periodischer Spitzenstrom

$f > 15\text{ Hz}$ I_{FRM} 20 A

$T_T = 85^\circ\text{C}$

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, $t < 10\text{ ms}$
Grenzlastintegral, $t < 10\text{ ms}$

$T_A = 25^\circ\text{C}$ i^2t 50 A²s

Operating junction temperature – Sperrschichttemperatur
Storage temperature – Lagerungstemperatur

T_j -50...+150°C

T_s -50...+150°C

1 Currently available: SK55SMC, SK56SMC – Momentan erhältlich: SK55SMC, SK56SMC

2 $I_F = 5\text{ A}$, $T_j = 25^\circ\text{C}$

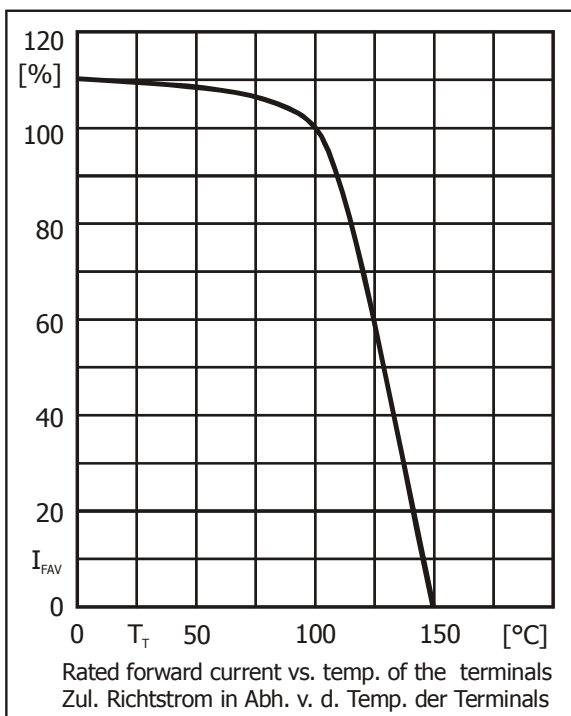
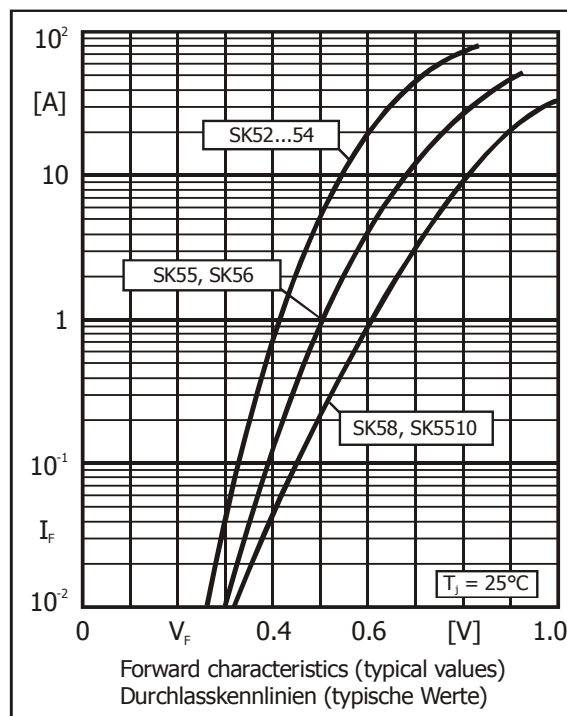
3 SK52SMC ... SK56SMC

4 SK58SMC, SK510SMC

Characteristics

Kennwerte

Leakage current	$T_j = 25^\circ\text{C}$	$V_R = V_{RRM}$	I_R	$< 150 \mu\text{A}$
Sperrstrom	$T_j = 100^\circ\text{C}$	$V_R = V_{RRM}$	I_R	$< 20 \text{ mA}$
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}	$< 10 \text{ K/W}$



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