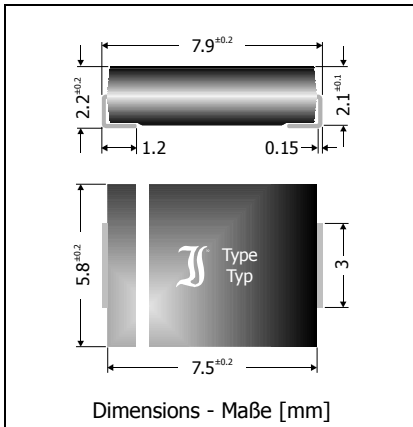


SK52SMC ... SK510SMC

Surface Mount Schottky Rectifiers Schottky-Gleichrichter für die Oberflächenmontage

Version 2007-04-25



Nominal current – Nennstrom

5 A

 Repetitive peak reverse voltage
 Periodische Spitzensperrspannung

20...100 V

 Plastic case
 Kunststoffgehäuse

 ~ SMC
 ~ 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
 $f > 15$ 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-Halbwelle
 $T_A = 25^\circ\text{C}$ I_{FSM}

100/110 A

 Rating for fusing, $t < 10$ ms
 Grenzlasterintegral, $t < 10$ 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

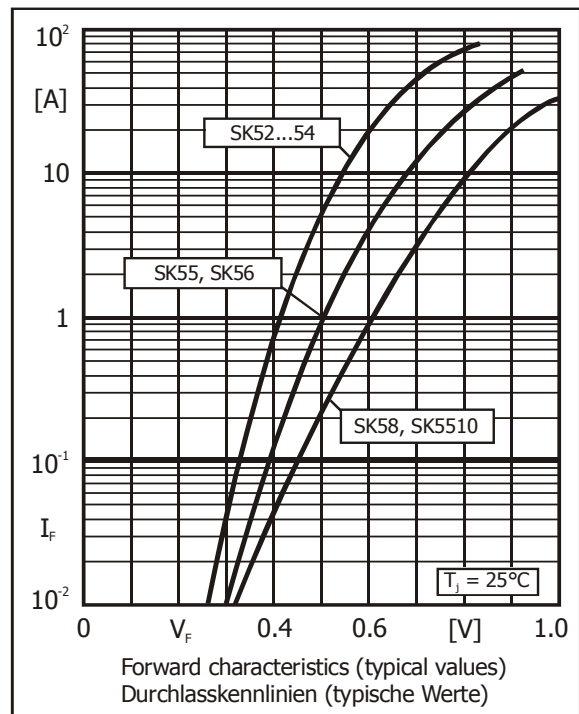
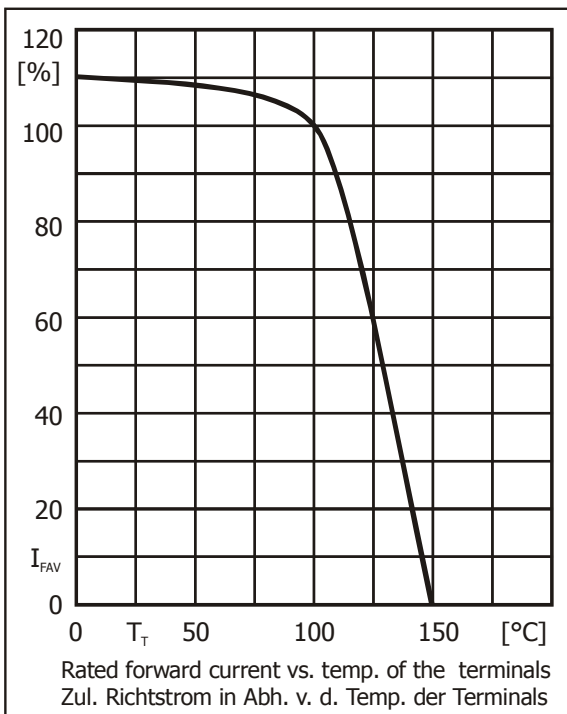
2 $I_F = 5$ A, $T_j = 25^\circ\text{C}$

3 SK52SMC ... SK56SMC

4 SK58SMC, SK510SMC

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}	< 10 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