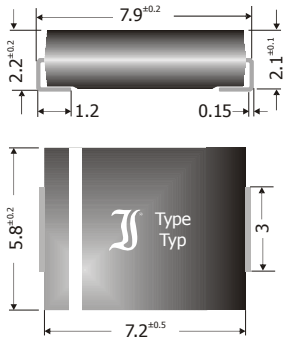
SK52SMC ... SK510SMC

Surface Mount Schottky Rectifiers
Schottky-Gleichrichter für die Oberflächenmontage

Version 2014-01-21



Dimensions - Maße [mm]

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	

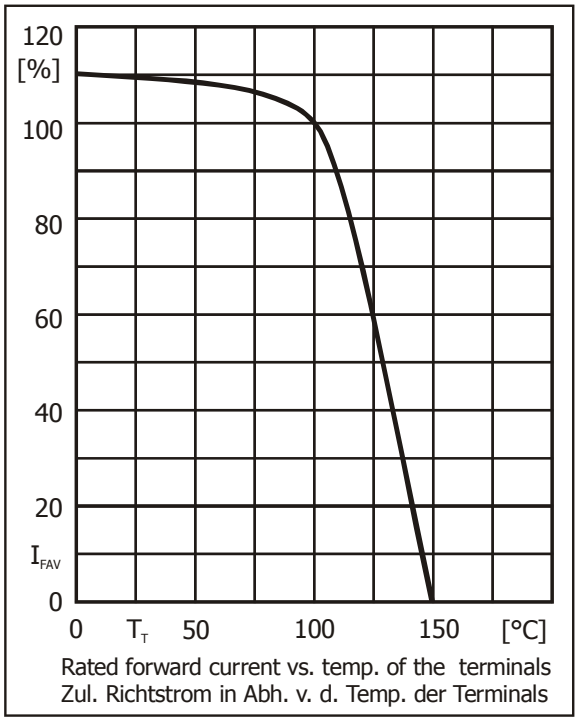
Maximum ratings **Grenzwerte**

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

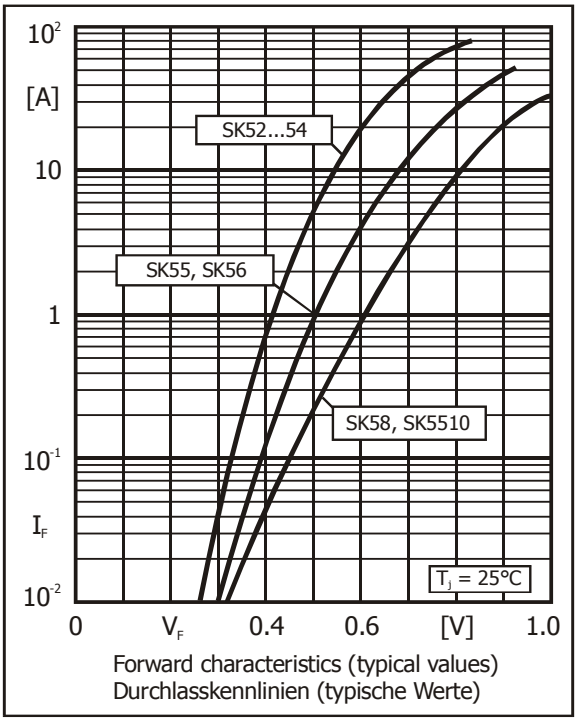
Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last	T_T = 100°C T_T = 85°C	I_{FAV} I_{FAV}	5 A [3] 5 A [4]
Repetitive peak forward current Periodischer Spitzenstrom	f > 15 Hz T_T = 85°C	I_{FRM}	20 A
Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwelle	T_A = 25°C	I_{FSM}	100/110 A
Rating for fusing, t < 10 ms Grenzlastintegral, t < 10 ms	T_A = 25°C	i^2t	50 A^2s
Operating junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur	T_j T_S		-50...+150°C -50...+150°C

1 Currently available: SK55SMC, SK56SMC – Momentan erhältlich: SK55SMC, SK56SMC
2 I_F = 5 A, T_j = 25°C
3 SK52SMC ... SK56SMC
4 SK58SMC, SK510SMC

Characteristics				**Kennwerte**
Leakage current Sperrstrom	T_j = 25°C T_j = 100°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



Rated forward current vs. temp. of the terminals
Zul. Richtstrom in Abh. v. d. Temp. der Terminals



Forward characteristics (typical values)
Durchlasskennlinien (typische Werte)

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