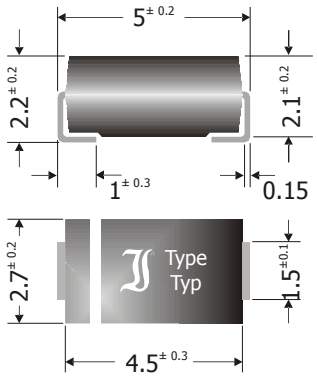
SK12 ... SK115

Surface Mount Schottky Rectifier Diodes
Schottky-Gleichrichterdioden für die Oberflächenmontage

Version 2014-07-03



Dimensions - Maße [mm]

Nominal current Nennstrom	1 A
Repetitive peak reverse voltage Periodische Spitzensperrspannung	20...150 V
Plastic case Kunststoffgehäuse	~ SMA ~ DO-214AC
Weight approx. – Gewicht ca.	0.07g
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]
SK12	20	20	< 0.50
SK13	30	30	< 0.50
SK14	40	40	< 0.50
SK15	50	50	< 0.70
SK16	60	60	< 0.70
SK18	80	80	< 0.85
SK110	100	100	< 0.85
SK115	150	150	< 0.85

Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last	T_T = 100°C	I_{FAV}	1 A
Repetitive peak forward current Periodischer Spitzenstrom	f > 15 Hz	I_{FRM}	6 A [2]
Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwelle	T_A = 25°C	I_{FSM}	30/33 A
Rating for fusing, t < 10 ms Grenzlastintegral, t < 10 ms	T_A = 25°C	i^2t	4.5 A^2s
Operating junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur		T_j T_S	-50...+150°C -50...+150°C

1 I_F = 1 A, T_j = 25°C
2 Max. temperature of the terminals T_T = 100°C – Max. Temperatur der Anschlüsse T_T = 100°C

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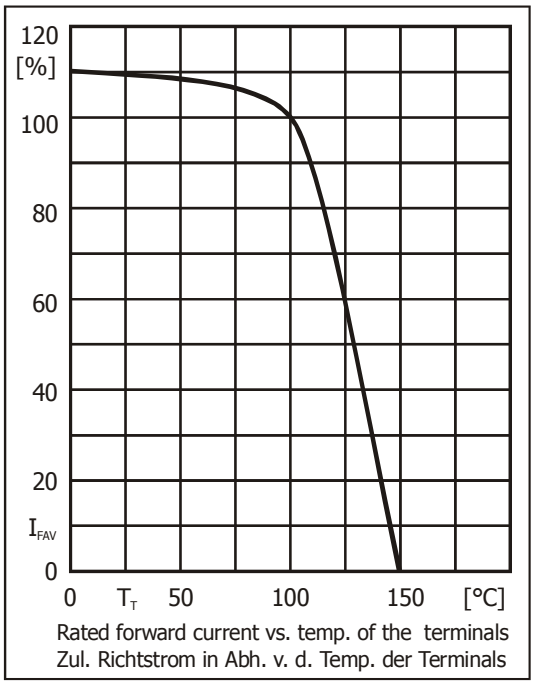
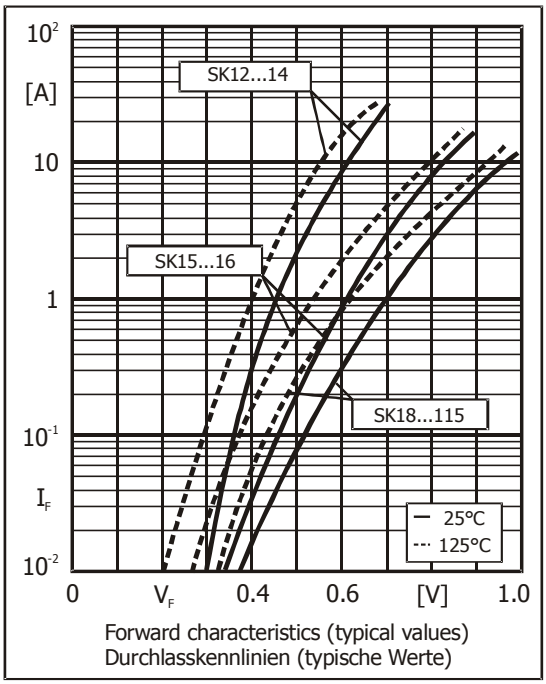
Characteristics — Kennwerte

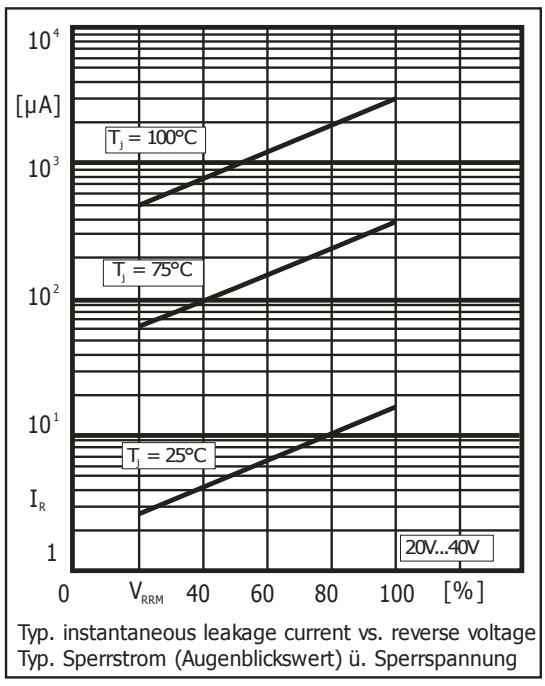
Leakage current Sperrstrom	SK12 ... SK110 T_j = 25°C $V_R = V_{RRM}$ SK115	I_R	< 0.5 mA < 0.2 mA
	SK12 ... SK110 T_j = 100°C $V_R = V_{RRM}$ SK115	I_R	< 5.0 mA < 2.0 mA
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft		R_{thA}	< 70 K/W [1])
Thermal resistance junction to terminal Wärmewiderstand Sperrschicht – Anschluss		R_{thT}	< 30 K/W



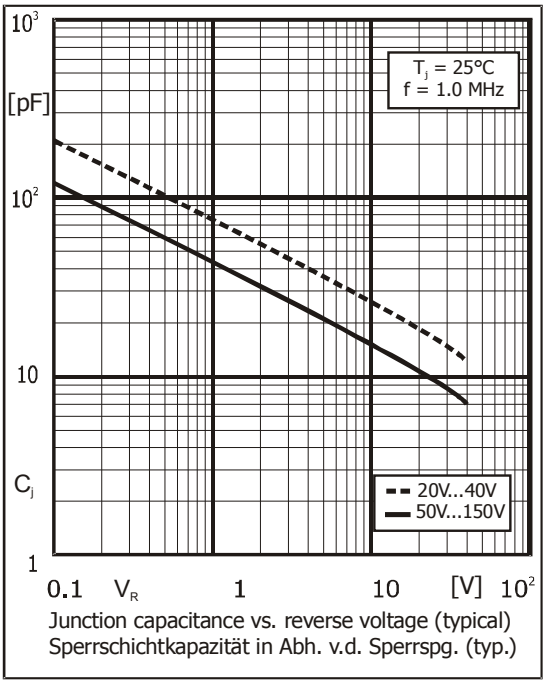
Rated forward current vs. temp. of the terminals
Zul. Richtstrom in Abh. v. d. Temp. der Terminals



Forward characteristics (typical values)
Durchlasskennlinien (typische Werte)



Typ. instantaneous leakage current vs. reverse voltage
Typ. Sperrstrom (Augenblickswert) ü. Sperrspannung



Junction capacitance vs. reverse voltage (typical)
Sperrschichtkapazität in Abh. v.d. Sperrspg. (typ.)

1 Mounted on P.C. board with 25 mm² copper pads at each terminal
Montage auf Leiterplatte mit 25 mm² Kupferbelag (Lötpad) an jedem Anschluss

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