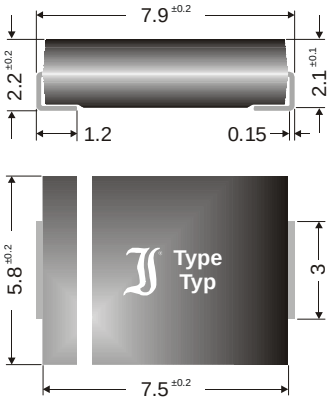
Diotec Semiconductor

Surface Mount Schottky-Rectifiers | **Schottky-Gleichrichter für die Oberflächenmontage**

Version 2004-07-29



Dimensions / Maße in mm

Nominal current 8 A
Nennstrom

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	Repetitive peak reverse voltage Periodische Spitzensperrspg. V_{RRM} [V]	Surge peak reverse voltage Stoßspitzensperrspannung V_{RSM} [V]	Forward voltage Durchlaßspannung V_F [V] [1]
SK82	20	20	< 0.55
SK83	30	30	< 0.55
SK84	40	40	< 0.55
SK85	50	50	< 0.68
SK86	60	60	< 0.68
SK88	80	80	< 0.83
SK810	100	100	< 0.83

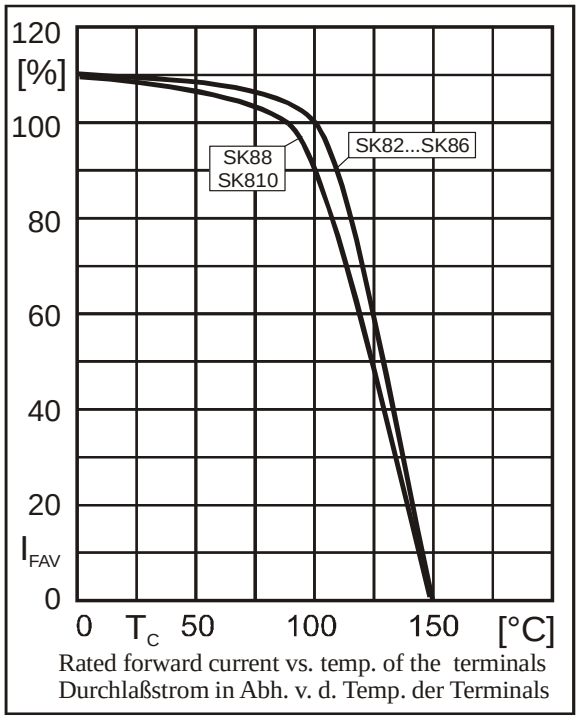
Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last	SK82...SK86 SK88, SK810	I_{FAV} I_{FAV}	8 A [2] 8 A [3]
Repetitive peak forward current Periodischer Spitzenstrom	f > 15 Hz	I_{FRM}	30 A [2]
Peak forward surge current, 50 / 60 Hz half sine-wave Stoßstrom für eine 50 / 60 Hz Sinus-Halbwelle	T_A = 25/C	I_{FSM}	125 / 135 A
Rating for fusing, t < 10 ms Grenzlastintegral, t < 10 ms	T_A = 25/C	i^2t	78 A^2s

[1]) I_F = 8 A, T_A = 25/C
[2]) Max. temperature of the terminals T_T = 100/C – Max. Temperatur der Anschlüsse T_T = 100/C
[3]) Max. temperature of the terminals T_T = 85/C – Max. Temperatur der Anschlüsse T_T = 85/C

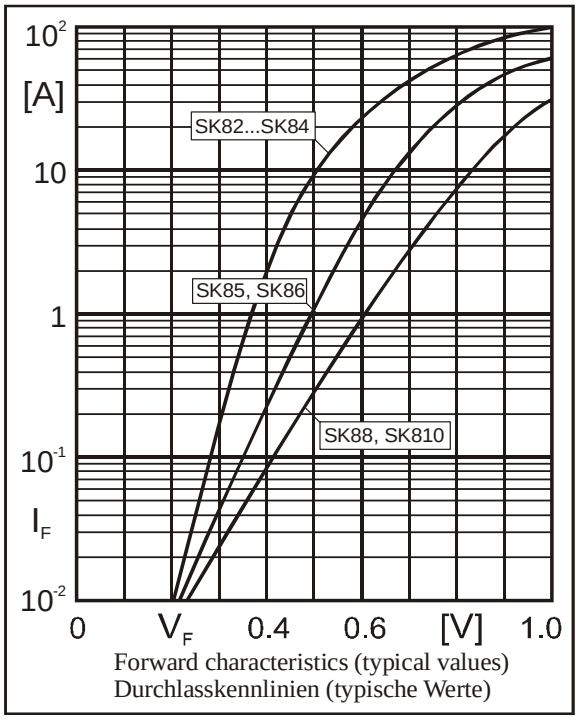
Operating junction temperature – Sperrschichttemperatur	T_j	– 50...+150/C
Storage temperature – Lagerungstemperatur	T_S	– 50...+150/C

Characteristics — Kennwerte

Leakage current – Sperrstrom	T_j = 25/C	$V_R = V_{RRM}$	I_R	< 150 :A
	T_j = 100/C	$V_R = V_{RRM}$	I_R	< 20 mA
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft			R_{thA}	< 50 K/W [1])
Thermal resistance junction to terminal Wärmewiderstand Sperrschicht – Anschluß			R_{thT}	< 10 K/W



Rated forward current vs. temp. of the terminals
Durchlaßstrom 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