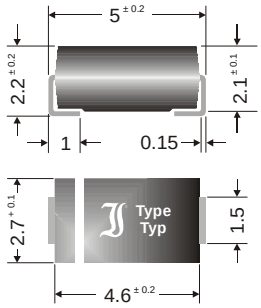
Diotec Semiconductor

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

Version 2004-07-29



Dimensions / Maße in mm

Nominal current – Nennstrom	3 A
Repetitive peak reverse voltage Periodische Spitzensperrspannung	20…100 V
Plastic case Kunststoffgehäuse	~ SMA ~ DO-214AC
Weight approx. – Gewicht ca.	0.07 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**

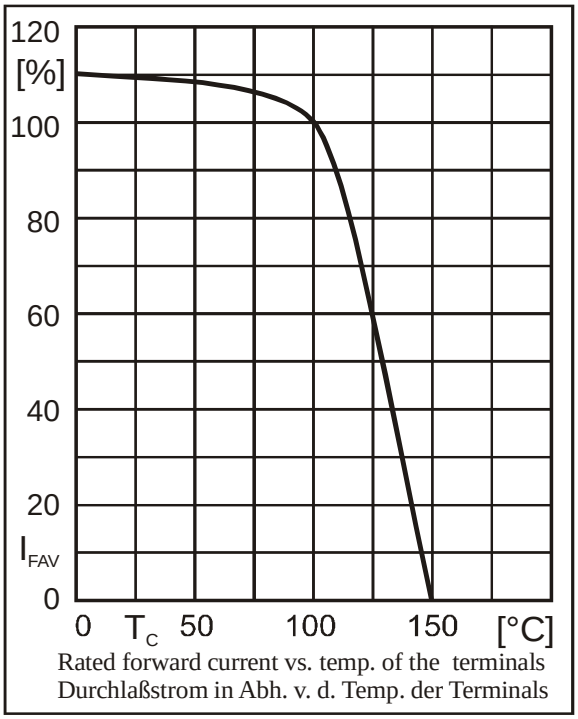
Type Typ	Repetitive peak reverse voltage Periodische Spitzensperrspg. V_{RRM} [V]	Surge peak reverse voltage Stoßspitzensperrspannung V_{RSM} [V]	Forward voltage Durchlaßspannung V_F [V] [1]
SK32SMA	20	20	< 0.50
SK33SMA	30	30	< 0.50
SK34SMA	40	40	< 0.50
SK35SMA	50	50	< 0.68
SK36SMA	60	60	< 0.68
SK38SMA	80	80	< 0.83
SK310SMA	100	100	< 0.83

Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last	T_T = 100/C	I_{FAV}	3 A
Repetitive peak forward current Periodischer Spitzenstrom	f > 15 Hz	I_{FRM}	20 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}	80 / 90 A
Rating for fusing, t < 10 ms Grenzlastintegral, t < 10 ms	T_A = 25/C	i^2t	32 A^2s
Operating junction temperature – Sperrschichttemperatur		T_j	– 50...+150/C
Storage temperature – Lagerungstemperatur		T_S	– 50...+150/C

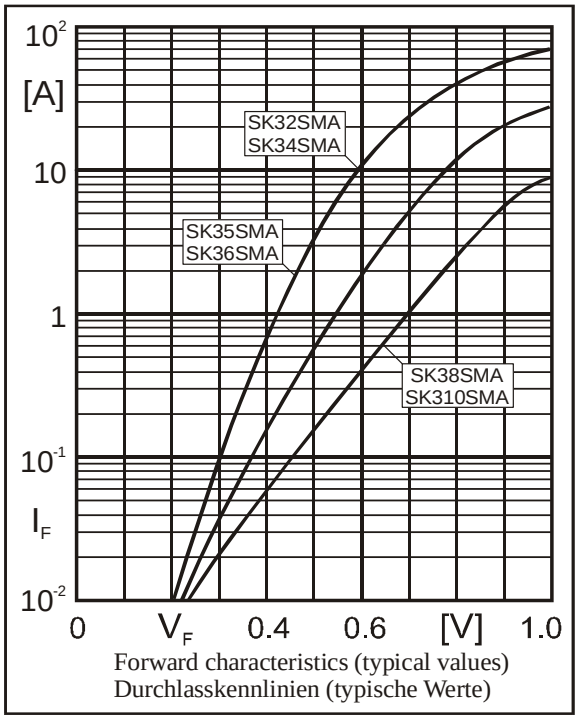
[1] I_F = 3 A, T_A = 25/C
[2] Max. temperature of the terminals T_T = 100/C – Max. Temperatur der Anschlüsse T_T = 100/C

Characteristics — Kennwerte

Leakage current – Sperrstrom	T_j = 25/C	$V_R = V_{RRM}$	I_R	< 80 :A
	T_j = 100/C	$V_R = V_{RRM}$	I_R	< 10.0 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}	< 20 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