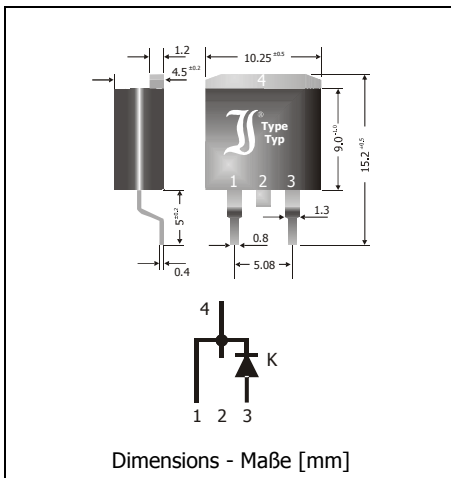


SK1020D2 ... SK10100D2
Surface Mount Schottky Rectifiers – Single Diode
Schottky-Gleichrichter für die Oberflächenmontage – Einzeldiode

Version 2010-09-22



Nominal Current
Nennstrom 10 A

Repetitive peak reverse voltage
Periodische Spitzensperrspannung 20...100 V

Plastic case
Kunststoffgehäuse TO-263AB
D²PAK

Weight approx.
Gewicht ca. 1.6 g

Plastic material has UL classification 94V-0
Gehäusematerial UL94V-0 klassifiziert

Standard packaging in tubes
Standard Lieferform in Stangen

**Maximum ratings and Characteristics****Grenz- und Kennwerte**

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⁾	
			$I_F = 5$ A	$I_F = 10$ A
SK1020D2	20	20	< 0.51	< 0.55
SK1030D2	30	30	< 0.51	< 0.55
SK1040D2	40	40	< 0.51	< 0.55
SK1045D2	45	45	< 0.51	< 0.55
SK1050D2	50	50	< 0.57	< 0.65
SK1060D2	60	60	< 0.57	< 0.65
SK1080D2	80	80	< 0.71	< 0.83
SK10100D2	100	100	< 0.71	< 0.83
Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last	$T_C = 100^\circ\text{C}$		I_{FAV}	10 A
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-Halbwellen	SK1020D2... SK1060D2	$T_A = 25^\circ\text{C}$	I_{FSM}	135/150 A
	SK1080D2... SK10100D2	$T_A = 25^\circ\text{C}$	I_{FSM}	115/125 A
Rating for fusing – Grenzlasterintegral, $t < 10$ ms	$T_A = 25^\circ\text{C}$		i^2t	80 A ² s
Junction temperature – Sperrschichttemperatur			T_j	-50...+150°C
Storage temperature – Lagerungstemperatur			T_s	-50...+175°C

1 $T_j = 25^\circ\text{C}$ 2 Max. temperature of the case $T_C = 100^\circ\text{C}$ – Max. Temperatur des Gehäuses $T_C = 100^\circ\text{C}$

Characteristics
Kennwerte

Leakage current Sperrstrom	SK1020D2... SK1045D2	$T_j = 25^\circ\text{C}$ $T_j = 100^\circ\text{C}$	$V_R = V_{RRM}$	I_R	< 300 μA < 45 mA
Leakage current Sperrstrom	SK1050D2... SK10100D2	$T_j = 25^\circ\text{C}$ $T_j = 100^\circ\text{C}$	$V_R = V_{RRM}$	I_R	< 200 μA < 25 mA
Thermal resistance junction to case Wärmewiderstand Sperrschicht - Gehäuse				R_{thC}	< 1.5 K/W

