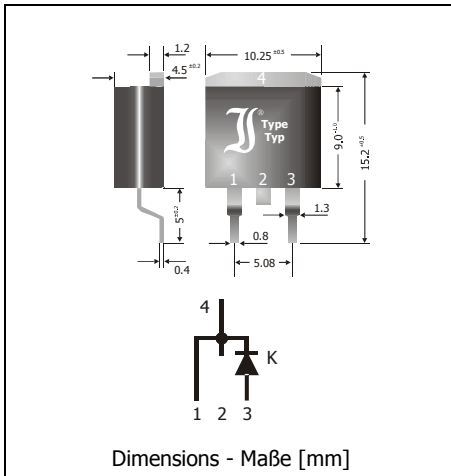


## SK1020D2 ... SK10100D2

### 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 D <sup>2</sup> PAK
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] <sup>1)</sup>	
			$I_F = 5 A$	$I_F = 10 A$
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		$T_C = 100^\circ C$	$I_{FAV}$	10 A
Repetitive peak forward current Periodischer Spitzenstrom		$f > 15 Hz$	$I_{FRM}$	30 A <sup>2)</sup>
Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwellen	SK1020D2... SK1060D2	$T_A = 25^\circ C$	$I_{FSM}$	135/150 A
	SK1080D2... SK10100D2	$T_A = 25^\circ C$	$I_{FSM}$	115/125 A
Rating for fusing – Grenzlastintegral, $t < 10 ms$		$T_A = 25^\circ C$	$i^2t$	80 A <sup>2</sup> s
Junction temperature – Sperrschichttemperatur			$T_j$	-50...+150°C
Storage temperature – Lagerungstemperatur			$T_s$	-50...+175°C

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

**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 $\mu\text{A}$ < 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 $\mu\text{A}$ < 25 mA
Thermal resistance junction to case Wärmewiderstand Sperrschicht - Gehäuse				$R_{thc}$	< 1.5 K/W

