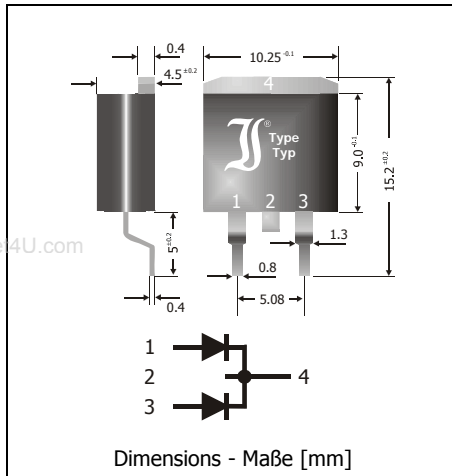


## SK2020CD2 ... SK20100CD2

**Surface Mount Schottky Rectifiers– Common Cathode**  
**Schottky-Gleichrichter für die Oberflächenmontage – Gemeinsame Kathode**

Version 2006-03-30



|   |                 |
|---|-----------------|
| Nominal Current<br>Nennstrom  | 20 A            |
| Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung                   | 20...100 V      |
| Plastic case<br>Kunststoffgehäuse   | TO-263<br>D2PAK |
| Weight approx.<br>Gewicht ca.   | 1.6 g           |
| Plastic material has UL classification 94V-0<br>Gehäusematerial UL94V-0 klassifiziert |                 |
| Standard packaging taped and reeled<br>Standard Lieferform gegurtet auf Rolle         |                 |



## Maximum ratings and Characteristics

## Grenz- und Kennwerte

| Type<br>Typ   | Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung<br>$V_{RRM}$ [V] | Surge peak reverse voltage<br>Stoßspitzensperrspannung<br>$V_{RSM}$ [V] | Forward Voltage<br>Durchlass-Spannung<br>$V_F$ [V] <sup>1) 2)</sup> |  |
|---|--|---|---|--|
|   |  |   | $I_F = 5 A$   | $I_F = 10 A$                             |
| SK2020CD2   | 20   | 20  | < 0.51  | < 0.55                                   |
| SK2030CD2   | 30   | 30  | < 0.51  | < 0.55                                   |
| SK2040CD2   | 40   | 40  | < 0.51  | < 0.55                                   |
| SK2045CD2   | 45   | 45  | < 0.51  | < 0.55                                   |
| SK2050CD2   | 50   | 50  | < 0.57  | < 0.65                                   |
| SK2060CD2   | 60   | 60  | < 0.57  | < 0.65                                   |
| SK2080CD2   | 80   | 80  | < 0.71  | < 0.83                                   |
| SK20100CD2  | 100  | 100   | < 0.71  | < 0.83                                   |
| Max. average forward rectified current, R-load<br>Dauergrenzstrom in Einwegschaltung mit R-Last       |  | $T_C = 100^\circ C$   | $I_{FAV}$<br>$I_{FAV}$  | 10 A <sup>2)</sup><br>20 A <sup>3)</sup> |
| Repetitive peak forward current<br>Periodischer Spitzenstrom  |  | $f > 15 Hz$   | $I_{FRM}$   | 30 A <sup>2)</sup>                       |
| Peak forward surge current<br>50/60 Hz half sine-wave<br>Stoßstrom für eine 50/60 Hz Sinus-Halbwellen | SK2020CD2...<br>SK2060CD2  | $T_A = 25^\circ C$  | $I_{FSM}$   | 130/150 A <sup>2)</sup>                  |
|   | SK2080CD2...<br>SK20100CD2   | $T_A = 25^\circ C$  | $I_{FSM}$   | 110/125 A <sup>2)</sup>                  |
| Rating for fusing, $t < 10 ms$<br>Grenzlastintegral, $t < 10 ms$                                      |  | $T_A = 25^\circ C$  | $i^2t$  | 80 A <sup>2</sup> s <sup>2)</sup>        |
| Junction temperature – Sperrschichttemperatur<br>Storage temperature – Lagerungstemperatur            |  |   | $T_j$<br>$T_s$  | -50...+150°C<br>-50...+175°C             |

1  $T_j = 25^\circ C$ 

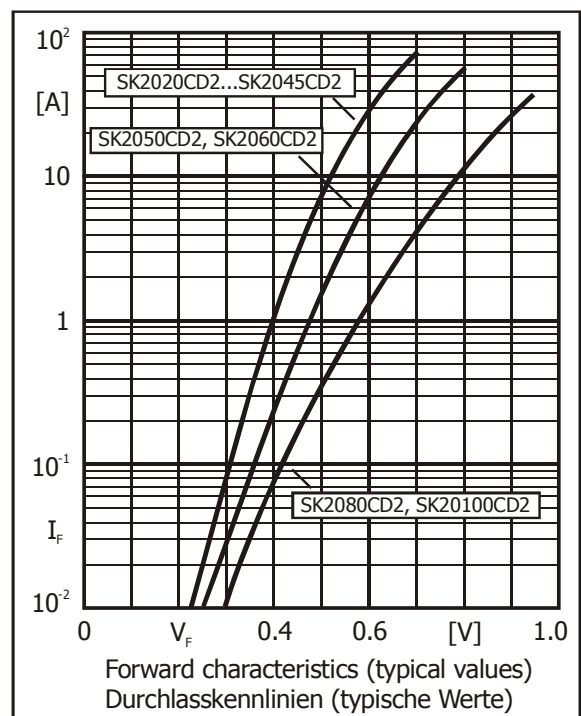
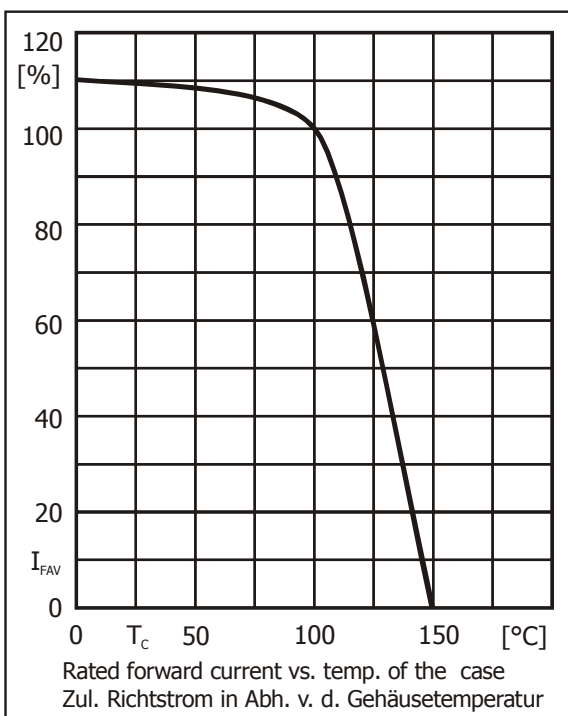
2 Per diode – Pro Diode

3 Per device (parallel operation) – Pro Bauteil (Parallelbetrieb)

**Characteristics**
**Kennwerte**

|   |                             |   |                 |           |                                |
|---|-----------------------------|---|-----------------|-----------|--------------------------------|
| Leakage current<br>Sperrstrom   | SK2020CD2...<br>SK2045CD2   | $T_j = 25^\circ\text{C}$<br>$T_j = 100^\circ\text{C}$ | $V_R = V_{RRM}$ | $I_R$     | < 300 $\mu\text{A}$<br>< 45 mA |
| Leakage current<br>Sperrstrom   | SK2050 CD2...<br>SK20100CD2 | $T_j = 25^\circ\text{C}$<br>$T_j = 100^\circ\text{C}$ | $V_R = V_{RRM}$ | $I_R$     | < 200 $\mu\text{A}$<br>< 25 mA |
| Thermal resistance junction to case<br>Wärmewiderstand Sperrschicht - Gehäuse |                             |   |                 | $R_{thc}$ | < 1.5 $\text{K/W}^1)$          |

www.DataSheet4U.com



1 Per device (parallel operation) – Pro Bauteil (Parallelbetrieb)