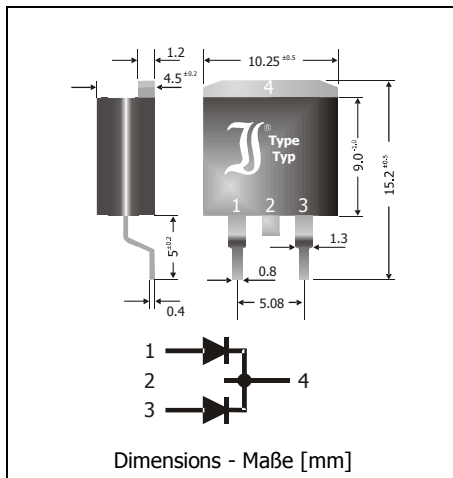


SK2020CD2 ... SK20100CD2

Surface Mount Schottky Rectifier Diodes– Common Cathode Schottky-Gleichrichterdioden für die Oberflächenmontage – Gemeinsame Kathode

Version 2010-09-22



| | |
|---|-----------------|
| Nominal Current Nennstrom | 20 A |
| Repetitive peak reverse voltage Periodische Spitzensperrspannung | 20...100 V |
| Plastic case Kunststoffgehäuse | TO-263 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) 2)} | |
|--|--|---|---|--|
| | | | $I_F = 5 A$ | $I_F = 10 A$ |
| 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 | < 0.63 | < 0.70 |
| SK2060CD2 | 60 | 60 | < 0.63 | < 0.70 |
| SK2080CD2 | 80 | 80 | < 0.77 | < 0.85 |
| SK20100CD2 | 100 | 100 | < 0.77 | < 0.85 |
| Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last | | $T_C = 100^\circ C$ | I_{FAV} I_{FAV} | 10 A ²⁾ 20 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-Halbwellen | SK2020CD2... SK2060CD2 | $T_A = 25^\circ C$ | I_{FSM} | 130/150 A ²⁾ |
| | SK2080CD2... SK20100CD2 | $T_A = 25^\circ C$ | I_{FSM} | 110/125 A ²⁾ |
| Rating for fusing, $t < 10 ms$ – Grenzlastintegral, $t < 10 ms$ | | $T_A = 25^\circ C$ | i^2t | 80 A ² s ²⁾ |
| Junction temperature – Sperrschichttemperatur in DC forward mode – bei Gleichstrom-Durchlassbetrieb | | | T_j T_j | -50...+150°C ≤ 200°C |
| Storage temperature – Lagerungstemperatur | | | T_s | -50...+175°C |

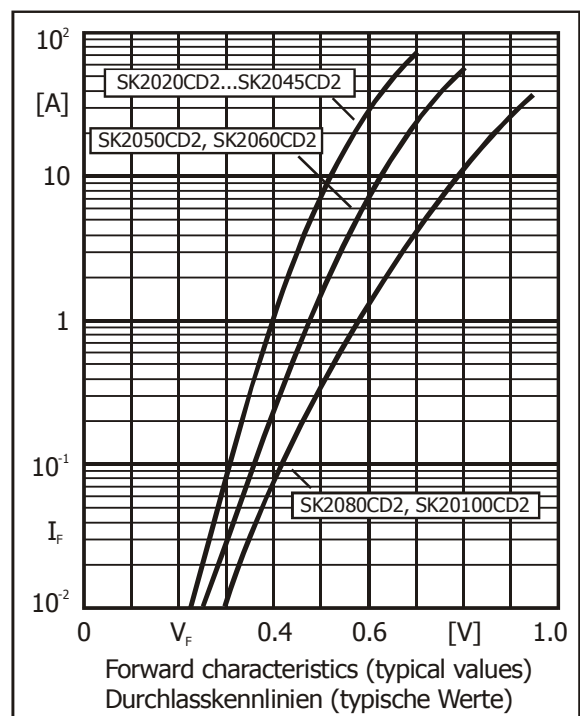
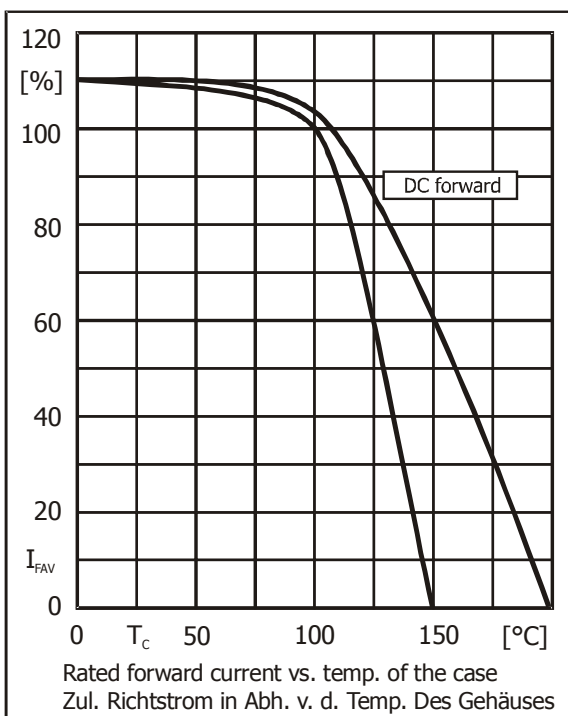
1 $T_j = 25^\circ C$

2 Per diode – Pro Diode

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

Characteristics
Kennwerte

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



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