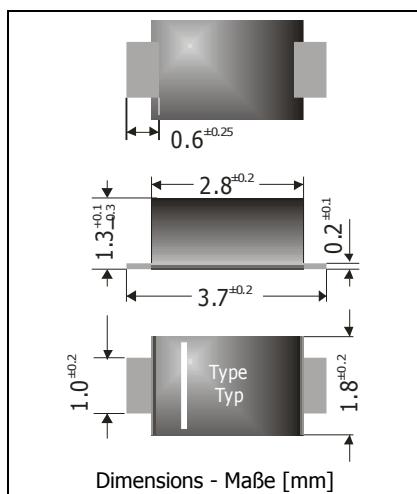


SKL12 ... SKL110
Surface Mount Schottky Rectifier Diodes
Schottky-Gleichrichterdioden für die Oberflächenmontage

Version 2014-01-09



| | |
|---|---|
| Nominal current Nennstrom | 1 A |
| Repetitive peak reverse voltage Periodische Spitzensperrspannung | 20...100 V |
| Plastic case Kunststoffgehäuse | SOD-123FL |
| Weight approx. Gewicht ca. | 0.02g |
| Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert |  |
| Standard packaging taped and reeled Standard Lieferform gegurtet auf Rolle | Green Molding Halogen-Free |

Maximum ratings

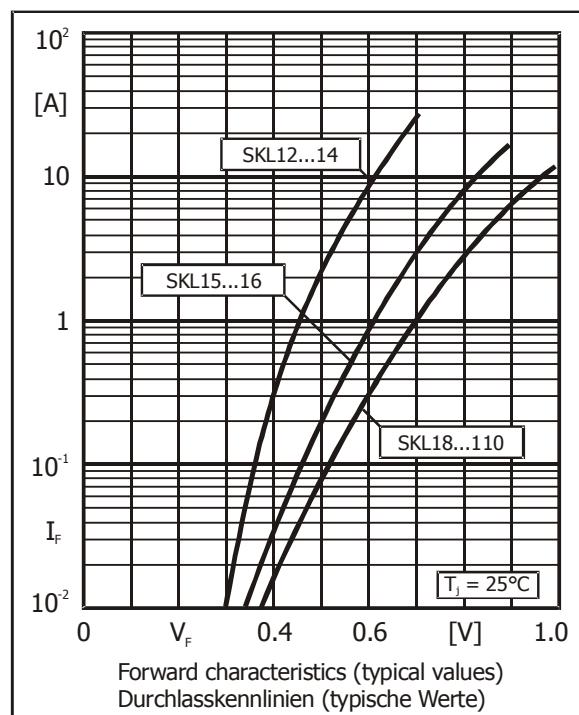
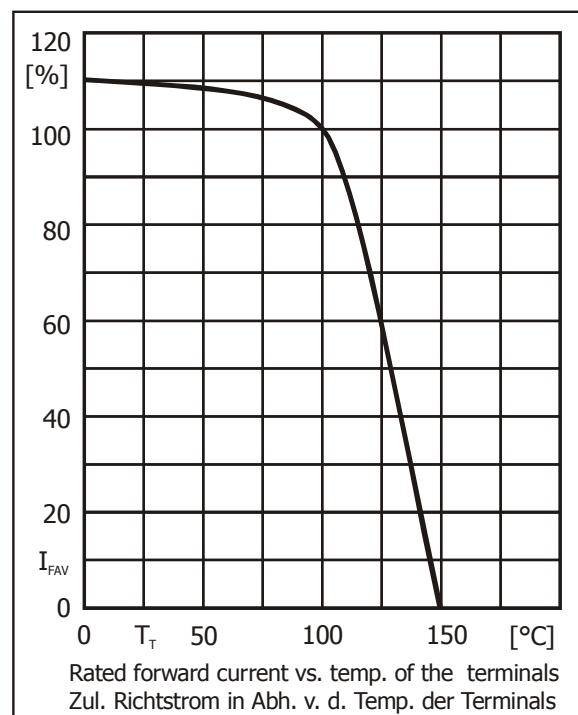
| Type Typ | Repetitive peak reverse voltage Periodische Spitzensperrspg. V_{RRM} [V] | Surge peak reverse voltage Stoßspitzensperrspannung V_{RSM} [V] | Forward voltage Durchlass-Spannung V_F [V] ¹⁾ |
|-------------|--|---|--|
| SKL12 | 20 | 20 | < 0.55 |
| SKL13 | 30 | 30 | < 0.55 |
| SKL14 | 40 | 40 | < 0.55 |
| SKL15 | 50 | 50 | < 0.70 |
| SKL16 | 60 | 60 | < 0.70 |
| SKL18 | 80 | 80 | < 0.85 |
| SKL110 | 100 | 100 | < 0.85 |

| | | | |
|--|---------------------------|-----------|------------------------------|
| Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last | $T_T = 100^\circ\text{C}$ | I_{FAV} | 1 A |
| Repetitive peak forward current Periodischer Spitzenstrom | $f > 15 \text{ Hz}$ | I_{FRM} | 4 A ²⁾ |
| Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwelle | $T_A = 25^\circ\text{C}$ | I_{FSM} | 22/25 A |
| Rating for fusing, $t < 10 \text{ ms}$ Grenzlastintegral, $t < 10 \text{ ms}$ | $T_A = 25^\circ\text{C}$ | i^2t | 2.4 A ² s |
| Operating junction temperature – Sperrschißtemperatur Storage temperature – Lagerungstemperatur | T_j T_s | | -50...+150°C -50...+150°C |

¹⁾ $I_F = 1 \text{ A}$, $T_j = 25^\circ\text{C}$ ²⁾ Max. temperature of the terminals $T_T = 100^\circ\text{C}$ – Max. Temperatur der Anschlüsse $T_T = 100^\circ\text{C}$

Characteristics
Kennwerte

| | | | | |
|---|---|--|----------------|-------------------------|
| Leakage current Sperrstrom | $T_j = 25^\circ\text{C}$ $T_j = 100^\circ\text{C}$ | $V_R = V_{RRM}$ $V_R = V_{RRM}$ | I_R I_R | < 0.2 mA typ. 2.0 mA |
| Junction Capacitance Sperrsichtkapazität | | $V_R = 6 \text{ V}$ $f = 1 \text{ MHz}$ | C_j | typ. 90 pF |
| Thermal resistance junction to ambient air Wärmewiderstand Sperrsicht – umgebende Luft | | | R_{thA} | < 110 K/W ¹⁾ |
| Thermal resistance junction to terminal Wärmewiderstand Sperrsicht – Anschluss | | | R_{thT} | < 40 K/W |



1 Mounted on P.C. board with 25 mm² copper pads at each terminal
Montage auf Leiterplatte mit 25 mm² Kupferbelag (Lötpad) an jedem Anschluss