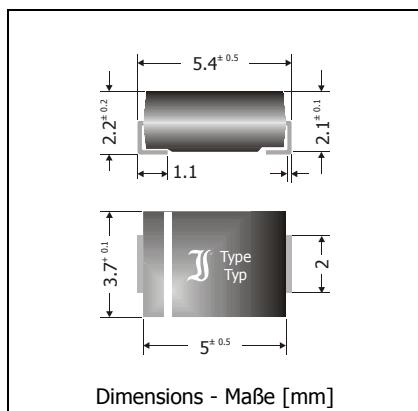


**SK52 ... SK510**
**Surface Mount Schottky Rectifiers**  
**Schottky-Gleichrichter für die Oberflächenmontage**

Version 2006-07-04



|   |                     |
|---|---------------------|
| Nominal current – Nennstrom   | 5 A                 |
| Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung                   | 20...100 V          |
| Plastic case<br>Kunststoffgehäuse   | ~ SMB<br>~ DO-214AA |
| Weight approx. – Gewicht ca.  | 0.1 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**

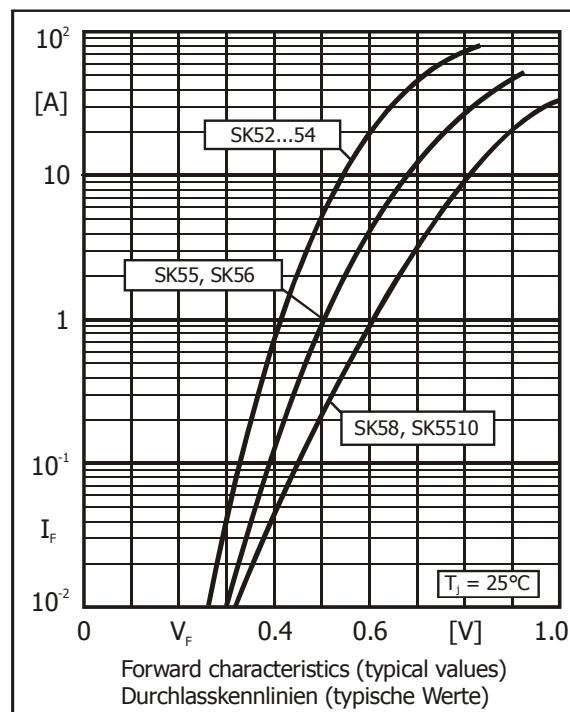
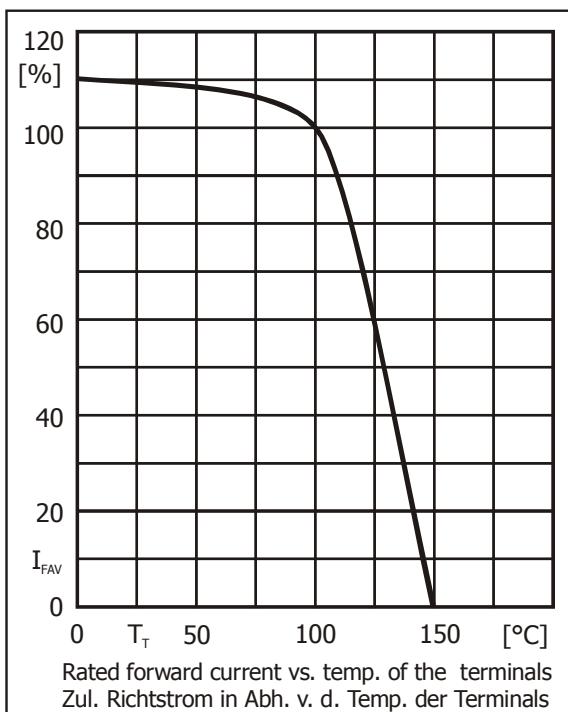
| Type<br>Typ | Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung<br>$V_{RRM}$ [V] | Surge peak reverse voltage<br>Stoßspitzensperrspannung<br>$V_{RSM}$ [V] | Forward voltage<br>Durchlass-Spannung<br>$V_F$ [V] <sup>1)</sup> |
|-------------|--|---|--|
| SK52        | 20   | 20  | < 0.55   |
| SK53        | 30   | 30  | < 0.55   |
| SK54        | 40   | 40  | < 0.55   |
| SK55        | 50   | 50  | < 0.68   |
| SK56        | 60   | 60  | < 0.68   |
| SK58        | 80   | 80  | < 0.83   |
| SK510       | 100  | 100   | < 0.83   |

|  |                            |           |  |
|--|----------------------------|-----------|--|
| Max. average forward rectified current, R-load<br>Dauergrenzstrom in Einwegschaltung mit R-Last    | SK52...SK56<br>SK58, SK510 | $I_{FAV}$ | 5 A <sup>2)</sup><br>5 A <sup>3)</sup> |
| Repetitive peak forward current<br>Periodischer Spitzenstrom                                       | $f > 15$ Hz                | $I_{FRM}$ | 20 A <sup>2)</sup>                     |
| Peak forward surge current, 50/60 Hz half sine-wave<br>Stoßstrom für eine 50/60 Hz Sinus-Halbwelle | $T_A = 25^\circ C$         | $I_{FSM}$ | 100/110 A                              |
| Rating for fusing, $t < 10$ ms<br>Grenzlastintegral, $t < 10$ ms                                   | $T_A = 25^\circ C$         | $i^2t$    | 50 A <sup>2</sup> s                    |
| Operating junction temperature – Sperrsichttemperatur<br>Storage temperature – Lagerungstemperatur | $T_j$<br>$T_s$             |           | -50...+150°C<br>-50...+150°C           |

<sup>1)</sup>  $I_F = 5$  A,  $T_j = 25^\circ C$ <sup>2)</sup> Max. temperature of the terminals  $T_T = 100^\circ C$  – Max. Temperatur der Anschlüsse  $T_T = 100^\circ C$ <sup>3)</sup> Max. temperature of the terminals  $T_T = 85^\circ C$  – Max. Temperatur der Anschlüsse  $T_T = 85^\circ C$

**Characteristics**
**Kennwerte**

|   |   |                                    |                |                                |
|---|---|------------------------------------|----------------|--------------------------------|
| Leakage current<br>Sperrstrom   | $T_j = 25^\circ\text{C}$<br>$T_j = 100^\circ\text{C}$ | $V_R = V_{RRM}$<br>$V_R = V_{RRM}$ | $I_R$<br>$I_R$ | < 150 $\mu\text{A}$<br>< 20 mA |
| Thermal resistance junction to ambient air<br>Wärmewiderstand Sperrsicht – umgebende Luft |   |                                    | $R_{thA}$      | < 45 K/W <sup>1)</sup>         |
| Thermal resistance junction to terminal<br>Wärmewiderstand Sperrsicht – Anschluss         |   |                                    | $R_{thT}$      | < 15 K/W                       |



1 Mounted on P.C. board with 50 mm<sup>2</sup> copper pads at each terminal  
Montage auf Leiterplatte mit 50 mm<sup>2</sup> Kupferbelag (Lötpad) an jedem Anschluss