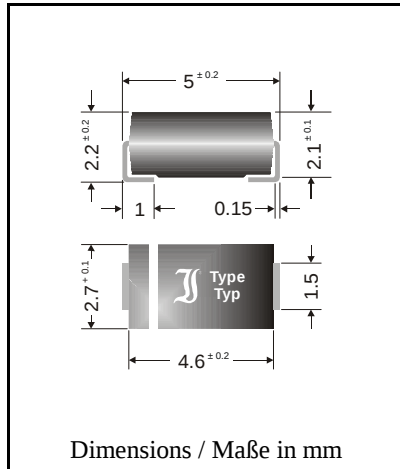


**Surface Mount**  
**Schottky-Rectifiers**
**Schottky-Gleichrichter**  
**für die Oberflächenmontage**

Version 2004-07-29



|                                              |            |
|----------------------------------------------|------------|
| Nominal current – Nennstrom                  | 3 A        |
| Repetitive peak reverse voltage              | 20...100 V |
| Periodische Spitzensperrspannung             |            |
| Plastic case                                 | ~ SMA      |
| Kunststoffgehäuse                            | ~ DO-214AC |
| Weight approx. – Gewicht ca.                 | 0.07 g     |
| Plastic material has UL classification 94V-0 |            |
| Gehäusematerial UL94V-0 klassifiziert        |            |
| Standard packaging taped and reeled          |            |
| Standard Lieferform gegurtet auf Rolle       |            |

**Maximum ratings****Grenzwerte**

| Type<br>Typ | Repetitive peak reverse voltage<br>Periodische Spitzensperrspg.<br>$V_{RRM}$ [V] | Surge peak reverse voltage<br>Stoßspitzensperrspannung<br>$V_{RSM}$ [V] | Forward voltage<br>Durchlaßspannung<br>$V_F$ [V] <sup>1)</sup> |
|-------------|----------------------------------------------------------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------|
| SK32SMA     | 20                                                                               | 20                                                                      | < 0.50                                                         |
| SK33SMA     | 30                                                                               | 30                                                                      | < 0.50                                                         |
| SK34SMA     | 40                                                                               | 40                                                                      | < 0.50                                                         |
| SK35SMA     | 50                                                                               | 50                                                                      | < 0.68                                                         |
| SK36SMA     | 60                                                                               | 60                                                                      | < 0.68                                                         |
| SK38SMA     | 80                                                                               | 80                                                                      | < 0.83                                                         |
| SK310SMA    | 100                                                                              | 100                                                                     | < 0.83                                                         |

|                                                                                                         |                     |           |                     |
|---------------------------------------------------------------------------------------------------------|---------------------|-----------|---------------------|
| Max. average forward rectified current, R-load<br>Dauergrenzstrom in Einwegschaltung mit R-Last         | $T_T = 100/C$       | $I_{FAV}$ | 3 A                 |
| Repetitive peak forward current<br>Periodischer Spitzenstrom                                            | $f > 15 \text{ Hz}$ | $I_{FRM}$ | 20 A <sup>2)</sup>  |
| Peak forward surge current, 50 / 60 Hz half sine-wave<br>Stoßstrom für eine 50 / 60 Hz Sinus-Halbwellen | $T_A = 25/C$        | $I_{FSM}$ | 80 / 90 A           |
| Rating for fusing, $t < 10 \text{ ms}$<br>Grenzlastintegral, $t < 10 \text{ ms}$                        | $T_A = 25/C$        | $i^2t$    | 32 A <sup>2</sup> s |
| Operating junction temperature – Sperrschichttemperatur                                                 |                     | $T_j$     | – 50...+150/C       |
| Storage temperature – Lagerungstemperatur                                                               |                     | $T_s$     | – 50...+150/C       |

<sup>1)</sup>  $I_F = 3 \text{ A}$ ,  $T_A = 25/C$ <sup>2)</sup> Max. temperature of the terminals  $T_T = 100/C$  – Max. Temperatur der Anschlüsse  $T_T = 100/C$

## Characteristics

## Kennwerte

Leakage current – Sperrstrom

$$T_j = 25/C$$

$$T_j = 100/C$$

$$V_R = V_{RRM}$$

$$V_R = V_{RRM}$$

$$I_R < 80 \mu A$$

$$I_R < 10.0 \text{ mA}$$

Thermal resistance junction to ambient air

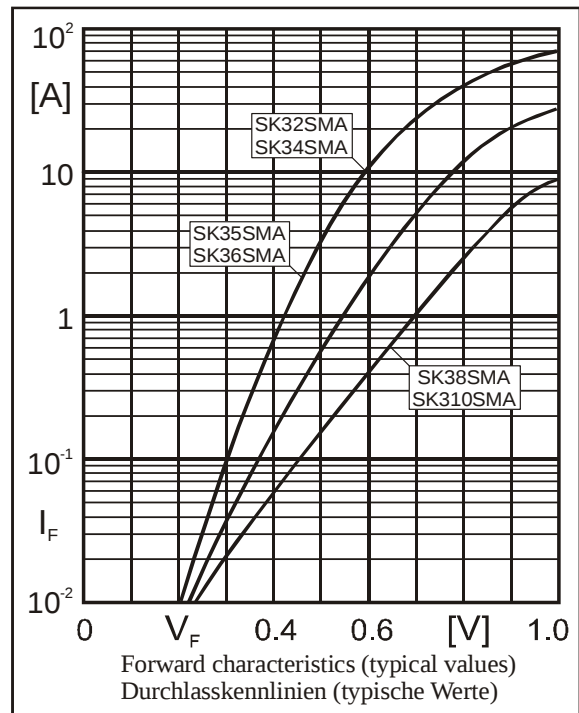
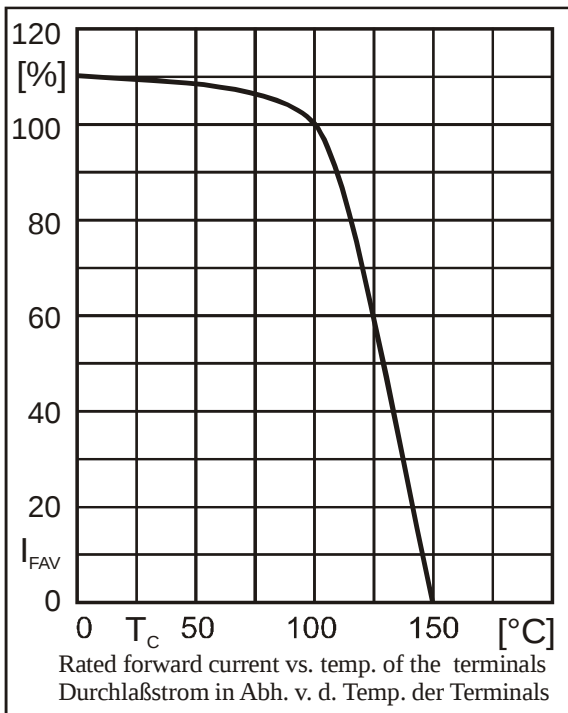
Wärmewiderstand Sperrschicht – umgebende Luft

$$R_{thA} < 70 \text{ K/W}^1)$$

Thermal resistance junction to terminal

Wärmewiderstand Sperrschicht – Anschluß

$$R_{thT} < 20 \text{ K/W}$$



<sup>1)</sup> 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 (Löt-pad) an jedem Anschluß