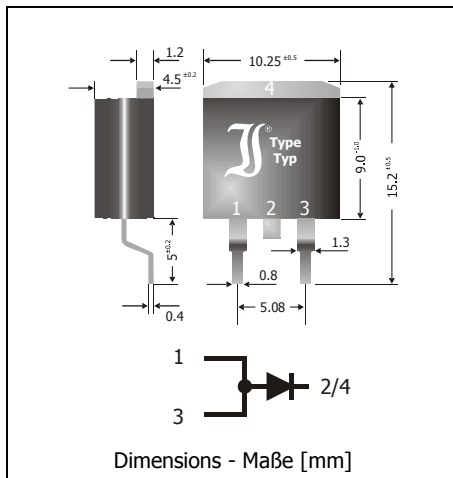


**SK1520YD2 ... SK1545YD2**
**Surface Mount Schottky Rectifiers – Single Diode**  
**Schottky-Gleichrichter für die Oberflächenmontage – Einzeldiode**

Version 2010-09-22



Nominal Current  
Nennstrom 15 A

Repetitive peak reverse voltage  
Periodische Spitzensperrspannung 20...45 V

Plastic case  
Kunststoffgehäuse TO-263AB  
D<sup>2</sup>PAK

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<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> |              |
|-------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------|------------------------------------------------------------------|--------------|
|             |                                                                                      |                                                                         | $I_F = 5 A$                                                      | $I_F = 15 A$ |
| SK1520YD2   | 20                                                                                   | 20                                                                      | < 0.51                                                           | < 0.65       |
| SK1530YD2   | 30                                                                                   | 30                                                                      | < 0.51                                                           | < 0.65       |
| SK1540YD2   | 40                                                                                   | 40                                                                      | < 0.51                                                           | < 0.65       |
| SK1545YD2   | 45                                                                                   | 45                                                                      | < 0.51                                                           | < 0.65       |

|                                                                                                                                                     |                     |                         |                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------|-----------------------------------------|
| Max. average forward rectified current (AC), R-load<br>Dauergrenzstrom in Einwegschaltung mit R-Last                                                | $T_C = 100^\circ C$ | $I_{FAV}$               | 15 A                                    |
| Max. current in DC forward mode<br>Dauergrenzstrom bei Gleichstrom-Durchlassbetrieb                                                                 | $T_C = 130^\circ C$ | $I_{FAV}$               | 15 A                                    |
| Repetitive peak forward current<br>Periodischer Spitzenstrom                                                                                        | $f > 15 \text{ Hz}$ | $I_{FRM}$               | 30 A <sup>2)</sup>                      |
| Peak forward surge current, 50/60 Hz half sine-wave<br>Stoßstrom für eine 50/60 Hz Sinus-Halbwellen                                                 | $T_A = 25^\circ C$  | $I_{FSM}$               | 135/150 A                               |
| Rating for fusing – Grenzlastintegral, $t < 10 \text{ ms}$                                                                                          | $T_A = 25^\circ C$  | $i^2 t$                 | 80 A <sup>2</sup> s                     |
| Junction temperature – Sperrschichttemperatur<br>in DC forward mode – bei Gleichstrom-Durchlassbetrieb<br>Storage temperature – Lagerungstemperatur |                     | $T_j$<br>$T_j$<br>$T_s$ | -50...+150°C<br>≤ 200°C<br>-50...+175°C |

1  $T_j = 25^\circ C$

2 Max. temperature of the case  $T_C = 100^\circ C$  – Max. Temperatur des Gehäuses  $T_C = 100^\circ C$

**Characteristics**
**Kennwerte**

|                                                                               |                                                                                   |                          |                                                                     |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|---------------------------------------------------------------------|
| Leakage current<br>Sperrstrom                                                 | $T_j = 25^\circ\text{C}$<br>$T_j = 25^\circ\text{C}$<br>$T_j = 100^\circ\text{C}$ | $V_R = V_{RRM}$<br>$I_R$ | $< 200\ \mu\text{A}$<br>typ. $60\ \mu\text{A}$<br>$< 10\ \text{mA}$ |
| Thermal resistance junction to case<br>Wärmewiderstand Sperrschicht - Gehäuse |                                                                                   | $R_{thC}$                | $< 2.0\ \text{K/W}$                                                 |

