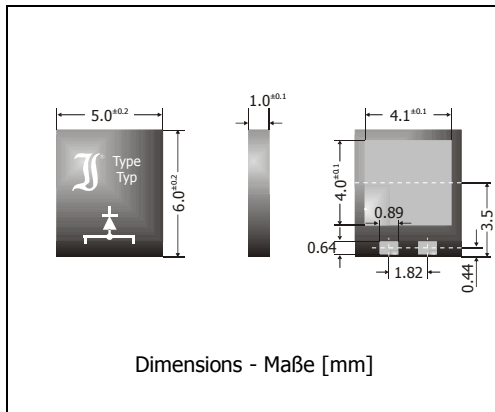



SK1520PQ ... SK15100PQ

Surface Mount Schottky Rectifiers Schottky-Gleichrichter für die Oberflächenmontage

Version 2009-10-06



| | |
|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Nominal Current – Nennstrom | 15 A |
| Repetitive peak reverse voltage Periodische Spitzensperrspannung | 20...100 V |
| Plastic case – Kunststoffgehäuse PowerQFN 5x6 | 5.0 x 6.0 x 1.0 [mm] |
| Weight approx. – Gewicht ca. | 0.1 g |
| Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert |  |
| Standard packaging taped and reeled Standard Lieferform gegurtet auf Rolle | |

Maximum ratings and Characteristics

Grenz- und Kennwerte

| Type Typ ¹⁾ | Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V] | Surge peak reverse voltage Stoßspitzensperrspannung V_{RSM} [V] | Forward Voltage Durchlass-Spannung V_F [V] ^{2) 3)} | |
|---------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------|--------------|
| | | | $I_F = 5$ A | $I_F = 15$ A |
| SK1520PQ | 20 | 20 | < 0.45 | < 0.55 |
| SK1530PQ | 30 | 30 | < 0.45 | < 0.55 |
| SK1540PQ | 40 | 40 | < 0.45 | < 0.55 |
| SK1550PQ | 50 | 50 | < 0.61 | < 0.68 |
| SK1560PQ | 60 | 60 | < 0.61 | < 0.68 |
| SK1580PQ | 80 | 80 | < 0.75 | < 0.83 |
| SK15100PQ | 100 | 100 | < 0.75 | < 0.83 |

| | | | |
|------------------------------------------------------------------------------------------------------------|---------------------------|-----------|------------------------------------------|
| Max. average forward rectified current, R-load Dauerstrom in Einwegschaltung mit R-Last | $T_C = 100^\circ\text{C}$ | I_{FAV} | 15A ²⁾ |
| Repetitive peak forward current Periodischer Spitzenstrom | $f > 15$ Hz | I_{FRM} | 55 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} | 280/320 A ²⁾ |
| Rating for fusing, $t < 10$ ms Grenzlastintegral, $t < 10$ ms | $T_A = 25^\circ\text{C}$ | i^2t | 390 A ² s ²⁾ |
| Junction temperature – Sperrschichttemperatur ... in DC forward mode – bei Gleichstrom-Durchlassbetrieb | | T_j | -50...+150°C $\leq 200^\circ\text{C}$ |
| Storage temperature – Lagerungstemperatur | | T_s | -50...+175°C |

1 50 V to 100 V types on request – 50 V bis 100 V Ausführung auf Anfrage

2 $T_j = 25^\circ\text{C}$

3 Both anode pins connected – Beide Anodenanschlüsse kontaktiert

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 | < 500 μA < 15 mA |
| Thermal resistance junction to case Wärmewiderstand Sperrschicht - Gehäuse | | | R_{thC} | < 2.0 K/W |

