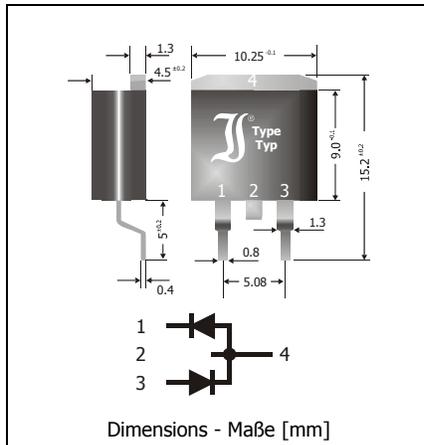


S16ASD2 ... S16MSD2

Surface Mount Si-Rectifiers – Half Bridge Si-Gleichrichter für die Oberflächenmontage – Halbbrücke

Version 2009-01-27



| | |
|---|--------------------------------|
| Nominal current Nennstrom | 16 A |
| Repetitive peak reverse voltage Periodische Spitzensperrspannung | 50...1000 V |
| Plastic case Kunststoffgehäuse | TO-263AB D ² 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 Typ | Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V] ¹⁾ | Surge peak reverse voltage Stoßspitzensperrspannung V_{RSM} [V] ¹⁾ | Forward voltage Durchlass-Spannung V_F [V] ¹⁾ , $T_j = 25^\circ\text{C}$ | |
|-------------|--|---|---|--------------------|
| | | | $I_F = 5\text{ A}$ | $I_F = 8\text{ A}$ |
| S16ASD2 | 50 | 50 | < 1.0 | < 1.1 |
| S16BSD2 | 100 | 100 | < 1.0 | < 1.1 |
| S16DSD2 | 200 | 200 | < 1.0 | < 1.1 |
| S16GSD2 | 400 | 400 | < 1.0 | < 1.1 |
| S16JSD2 | 600 | 600 | < 1.0 | < 1.1 |
| S16KSD2 | 800 | 800 | < 1.0 | < 1.1 |
| S16MSD2 | 1000 | 1000 | < 1.0 | < 1.1 |

| | | | |
|--|--|------------------------|---|
| Max. average forward current, R-load Dauergrenzstrom mit R-Last | $T_C = 100^\circ\text{C}$ $T_C = 100^\circ\text{C}$ | I_{FAV} I_{FAV} | 8 A ¹⁾ 16 A ²⁾ |
| Repetitive peak forward current Periodischer Spitzenstrom | $f > 15\text{ Hz}$ | I_{FRM} | 30 A ³⁾ |
| 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} | 135/150 A ¹⁾ |
| Rating for fusing, $t < 10\text{ ms}$ Grenzlastintegral, $t < 10\text{ ms}$ | $T_A = 25^\circ\text{C}$ | i^2t | 90 A ² s ¹⁾ |
| Junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur | | T_j T_S | -50...+150°C -50...+175°C |

- 1 Per diode – Pro Diode
- 2 Output current when operating two devices in a full bridge configuration
Ausgangsstrom bei Betrieb zweier Bauteile als Vollbrücke
- 3 Max. temperature of the case $T_C = 100^\circ\text{C}$ – Max. Temperatur des Gehäuses $T_C = 100^\circ\text{C}$

Characteristics

Kennwerte

| | | | |
|---|--|-----------|--------------------------|
| Leakage current Sperrstrom | $T_j = 25^\circ\text{C}$ $V_R = V_{RRM}$ | I_R | $< 10 \mu\text{A}$ |
| Thermal resistance junction to case Wärmewiderstand Sperrschicht – Gehäuse | | R_{thC} | $< 2.5 \text{ K/W}^{-1}$ |

