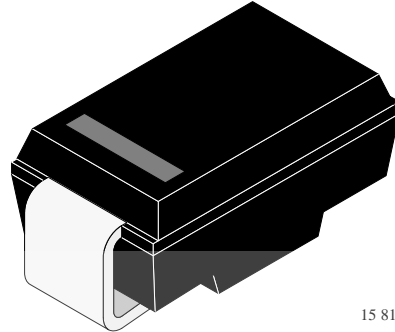


Fast Silicon Mesa SMD Rectifier

Features

- Glass passivated junction
- Low reverse current
- High reverse voltage
- Fast reverse recovery time
- Wave and reflow solderable



15 811

Applications

Freewheeling diodes in SMPS and converters
 Snubber diodes

Absolute Maximum Ratings

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

| Parameter | Test Conditions | Type | Symbol | Value | Unit |
|--|-------------------------------------|------|-----------------|------------|------------------|
| Reverse voltage= | | | $V_R =$ | 1000 | V |
| Repetitive peak reverse voltage | | | V_{RRM} | | |
| Peak forward surge current | $t_p = 10\text{ms}$, half sinewave | | I_{FSM} | 30 | A |
| Average forward current | $T_{amb} = 65^\circ\text{C}$ | | I_{FAV} | 1.5 | A |
| Junction and storage temperature range | | | $T_j = T_{stg}$ | -55...+150 | $^\circ\text{C}$ |
| Pulse energy in avalanche mode, non repetitive (inductive load switch off) | $I_{(BR)R} = 1\text{A}$ | | E_R | 20 | mJ |

Maximum Thermal Resistance

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

| Parameter | Test Conditions | Symbol | Value | Unit |
|------------------|---|------------|-------|------|
| Junction case | | R_{thJC} | 25 | K/W |
| Junction ambient | mounted on epoxy-glass hard tissue, 17mm ² 35μm Cu | R_{thJA} | 150 | K/W |
| | mounted on epoxy-glass hard tissue, 50mm ² 35μm Cu | R_{thJA} | 125 | K/W |
| | mounted on Al-oxid-ceramic (Al ₂ O ₃), 50mm ² 35μm Cu | R_{thJA} | 100 | K/W |