

TECHNICAL DATA
DATA SHEET D0117 REV. –

SILICON SCHOTTKY RECTIFIER DIE

Applications:

- Switching Power Supply • Converters • Free-Wheeling Diodes • Polarity Protection Diode

Features:

- Ultra low Reverse Leakage Current
- Soft Reverse Recovery at Low and High Temperature
- Very Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capacity
- Guard Ring for Enhanced Durability and Long Term Reliability
- Guaranteed Reverse Avalanche Characteristics
- Electrically / Mechanically Stable during and after Packaging

Maximum Ratings:

| Characteristics | Symbol | Condition | Max. | Units |
|---------------------------------------------|-------------|---------------------------------------|-------------|-------|
| Peak Inverse Voltage | V_{RWM} | - | 45 | V |
| Average Forward Current | $I_{F(AV)}$ | 50% duty cycle, rectangular wave form | 30 | A |
| Peak One Cycle Non-Repetitive Surge Current | I_{FSM} | 8.3 ms, Sine pulse ⁽¹⁾ | 570 | A |
| Junction Temperature | T_J | - | -55 to +150 | °C |
| Storage Temperature | T_{stg} | - | -55 to +150 | °C |

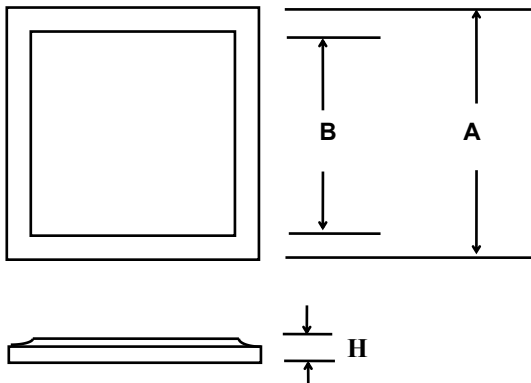
Electrical Characteristics:

| Characteristics | Symbol | Condition | Max. | Units |
|----------------------|----------|-------------------------------------------------------------------------------------|------|-------|
| Forward Voltage Drop | V_{F1} | @ 30A, Pulse, $T_J = 25\text{ °C}$ | 0.56 | V |
| | V_{F2} | @ 30A, Pulse, $T_J = 125\text{ °C}$ | 0.51 | V |
| Reverse Current | I_{R1} | @ $V_R = 45V$, Pulse, $T_J = 25\text{ °C}$ | 3 | mA |
| | I_{R2} | @ $V_R = 45V$, Pulse, $T_J = 125\text{ °C}$ | 140 | mA |
| Junction Capacitance | C_T | @ $V_R = 5V$, $T_C = 25\text{ °C}$ $f_{SIG} = 1MHz$, $V_{SIG} = 50mV$ (p-p) | 1600 | pF |

(1) in SHD package

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Mechanical Dimensions: In Inches (mm)



Bottom side metalization Ag-5kA minimum
 Top side metalization Al -25kA minimum
 Bottom side is cathode, top side is anode
 Dimension H = 0.0105±0.001(0.27±0.026) (It can be customized according to customer requirements)

| A | B |
|-----------------------------|----------------------------|
| 0.175 ± 0.003(4.45 ± 0.008) | 0.163 ± 0.003(4.14 ± 0.08) |

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