

TECHNICAL DATA
DATA SHEET D0037 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:

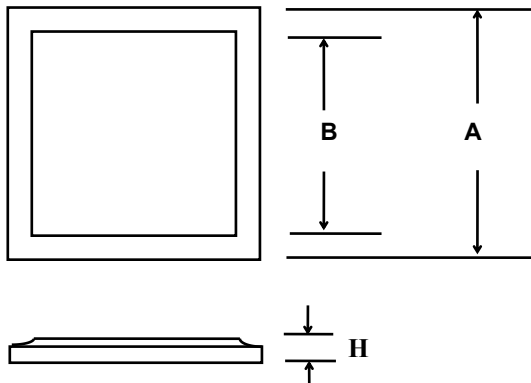
| Characteristics | Symbol | Condition | Max. | Units |
|---|-------------|---------------------------------------|-------------|-------|
| Peak Inverse Voltage | V_{RWM} | - | 150 | V |
| Average Forward Current | $I_{F(AV)}$ | 50% duty cycle, rectangular wave form | 30 | A |
| Peak One Cycle Non-Repetitive Surge Current | I_{FSM} | 8.3 ms, Sine pulse | 570 | A |
| Junction Temperature | T_J | - | -55 to +200 | °C |
| Storage Temperature | T_{stg} | - | -55 to +200 | °C |

Electrical Characteristics:

| Characteristics | Symbol | Condition | Max. | Units |
|----------------------|----------|---|------|-------|
| Forward Voltage Drop | V_{F1} | @ 30A, Pulse, $T_J = 25\text{ °C}$ | 0.89 | V |
| | V_{F2} | @ 30A, Pulse, $T_J = 125\text{ °C}$ | 0.74 | V |
| Reverse Current | I_{R1} | @ $V_R = 150V$, Pulse, $T_J = 25\text{ °C}$ | 1.0 | mA |
| | I_{R2} | @ $V_R = 150V$, Pulse, $T_J = 125\text{ °C}$ | 15 | mA |
| Junction Capacitance | C_T | @ $V_R = 5V$, $T_C = 25\text{ °C}$ $f_{SIG} = 1MHz$, $V_{SIG} = 50mV$ (p-p) | 1000 | pF |

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Mechanical Dimensions: In Inches (mm)



Bottom side metalization Ag-5kA minimum
 Top side metalization Ag -25kA minimum
 Bottom side is cathode, top side is anode
 Dimension H = 0.0155±0.001(0.39±0.025) (It can be customized according to customer requirements)

| A | B |
|----------------------------|----------------------------|
| 0.165 ± 0.003(4.19 ± 0.08) | 0.158 ± 0.003(4.01 ± 0.08) |

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