

TECHNICAL DATA DATA SHEET D0110 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 | 15 | Α |
| Peak One Cycle Non- Repetitive Surge Current | I _{FSM} | 8.3 ms, Sine pulse (1) | 280 | Α |
| Junction Temperature | TJ | - | -55 to +150 | °C |
| Storage Temperature | T _{stg} | - | -55 to +150 | °C |

Electrical Characteristics:

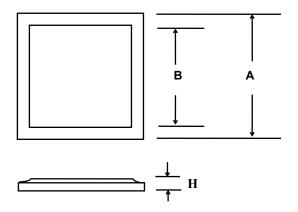
| Characteristics | Symbol | Condition | Max. | Units |
|----------------------|-----------------|---------------------------------------|------|-------|
| Forward Voltage Drop | V_{F1} | @ 15A, Pulse, T _J = 25 °C | 0.56 | V |
| | V_{F2} | @ 15A, Pulse, T _J = 125 °C | 0.51 | V |
| Reverse Current | I _{R1} | @V _R = 45V, Pulse, | 1.5 | mA |
| | | T _J = 25 °C | | |
| | I _{R2} | @V _R = 45V, Pulse, | 70 | mA |
| | | T _J = 125 °C | | |
| Junction Capacitance | Ст | $@V_R = 5V, T_C = 25 °C$ | 800 | pF |
| | | $f_{SIG} = 1MHz,$ | | |
| | | $V_{SIG} = 50 \text{mV (p-p)}$ | | |

(1) in SHD package



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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 =0.0105±0.001(0.27±0.026) (It can be customized according to customer requirements)

| Α | В | |
|-----------------------------------|-----------------------------------|--|
| $0.125 \pm 0.003 (3.18 \pm 0.08)$ | $0.116 \pm 0.003 (2.95 \pm 0.08)$ | |

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