

**TECHNICAL DATA**  
**DATA SHEET D0106 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                        | $V_{RWM}$   | -                                     | 100         | V     |
| Average Forward Current                     | $I_{F(AV)}$ | 50% duty cycle, rectangular wave form | 5           | A     |
| Peak One Cycle Non-Repetitive Surge Current | $I_{FSM}$   | 8.3 ms, Sine pulse <sup>(1)</sup>     | 120         | A     |
| Junction Temperature                        | $T_J$       | -                                     | -55 to +200 | °C    |
| Storage Temperature                         | $T_{stg}$   | -                                     | -55 to +200 | °C    |

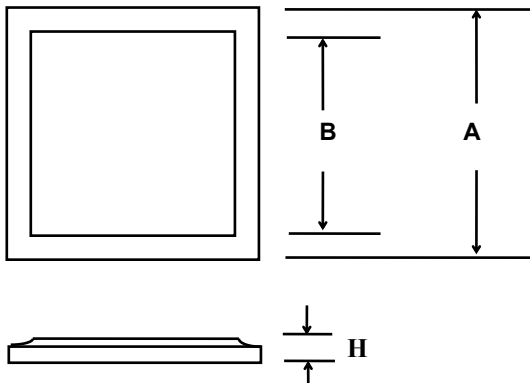
### Electrical Characteristics:

| Characteristics      | Symbol   | Condition   | Max. | Units |
|----------------------|----------|---|------|-------|
| Forward Voltage Drop | $V_{F1}$ | @ 5A, Pulse, $T_J = 25\text{ °C}$   | 0.84 | V     |
|                      | $V_{F2}$ | @ 5A, Pulse, $T_J = 125\text{ °C}$  | 0.68 | V     |
| Reverse Current      | $I_{R1}$ | @ $V_R = 100V$ , Pulse, $T_J = 25\text{ °C}$  | 0.13 | mA    |
|                      | $I_{R2}$ | @ $V_R = 100V$ , Pulse, $T_J = 125\text{ °C}$                                       | 2.8  | mA    |
| Junction Capacitance | $C_T$    | @ $V_R = 5V$ , $T_C = 25\text{ °C}$<br>$f_{SIG} = 1MHz$ ,<br>$V_{SIG} = 50mV$ (p-p) | 200  | pF    |

(1) in SHD package

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**Mechanical Dimensions: In Inches (mm)**



Bottom side metallization Ag thickness is 5KA  
 Top side metallization Al thickness is 25KA  
 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                          |
|----------------------------|----------------------------|
| 0.066 ± 0.003(1.68 ± 0.08) | 0.058 ± 0.003(1.47 ± 0.08) |

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