

**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 <sup>(1)</sup>	570	A
Junction Temperature	$T_J$	-	-55 to +150	°C
Storage Temperature	$T_{stg}$	-	-55 to +150	°C

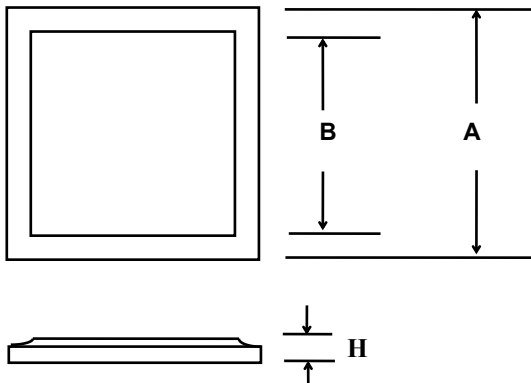
**Electrical Characteristics:**

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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