

# TECHNICAL DATA DATA SHEET D0118 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 <sub>F(AV)</sub>	50% duty cycle, rectangular wave form	30	Α
Peak One Cycle Non- Repetitive Surge Current	I <sub>FSM</sub>	8.3 ms, Sine pulse (1)	570	Α
Junction Temperature	TJ	-	-55 to +175	°C
Storage Temperature	T <sub>stg</sub>	-	-55 to +175	°C

### **Electrical Characteristics:**

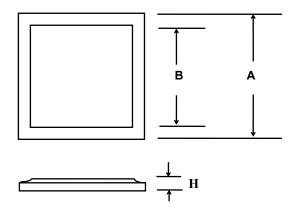
Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop	V <sub>F1</sub>	@ 30A, Pulse, T <sub>J</sub> = 25 °C	0.64	V
	V <sub>F2</sub>	@ 30A, Pulse, T <sub>J</sub> = 125 °C	0.57	\ \
Reverse Current	I <sub>R1</sub>	@V <sub>R</sub> = 45V, Pulse,	0.8	mA
		T <sub>J</sub> = 25 °C		
	I <sub>R2</sub>	@V <sub>R</sub> = 45V, Pulse,	30	mA
		T <sub>J</sub> = 125 °C		
Junction Capacitance	Ст	@V <sub>R</sub> = 5V, T <sub>C</sub> = 25 °C	1600	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 AI -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	
$0.175 \pm 0.003 (4.45 \pm 0.008)$	$0.163 \pm 0.003 (4.14 \pm 0.08)$	

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