

TECHNICAL DATA
DATA SHEET D0096 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	<b>Symbol</b>	Condition	Max.	Units
Peak Repetitive Reverse Voltage	$V_{RRM}$	-	30	V
Working Peak Reverse Voltage	$V_{RWM}$			
DC Blocking Voltage	$V_R$			
Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle,	60	Α
		rectangular wave form		
Peak One Cycle Non-Repetitive	I <sub>FSM</sub>	8.3 ms, Sine pulse (1)	860	Α
Surge Current		·		
Junction Temperature	TJ	-	-55 to +150	°C
Storage Temperature	T <sub>stg</sub>	-	-55 to +150	ô

#### **Electrical Characteristics:**

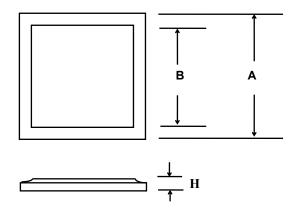
Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop	V <sub>F1</sub>	@ 60A, Pulse, T <sub>J</sub> = 25 °C	0.53	V
	V <sub>F2</sub>	@ 60A, Pulse, T <sub>J</sub> = 125 °C	0.43	V
Reverse Current	I <sub>R1</sub>	@V <sub>R</sub> = 30V, Pulse,	6	mA
		T <sub>J</sub> = 25 °C		
	I <sub>R2</sub>	@V <sub>R</sub> = 30V, Pulse,	300	mA
		T <sub>J</sub> = 125 °C		
Junction Capacitance	C⊤	$@V_R = 5V, T_C = 25 °C$	3300	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 =0.0155±0.0005(0.39±0.013) (It can be customized according to customer requirements)

Α	В
$0.200 \pm 0.003 (5.08 \pm 0.08)$	$0.192 \pm 0.003 (4.88 \pm 0.08)$

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