

TECHNICAL DATA DATA SHEET D0115 REV. –

# SILICON SCHOTTKY RECTIFIER DIE Ultra Low Reverse Leakage 200°C Operating Temperature

## **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
- Out Performs 100 Volt Ultrafast Rectifiers

#### **Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V <sub>RWM</sub>	-	100	V
Average Forward Current	I <sub>F(AV)</sub> 50% duty cycle, rectangular wave form		15	A
Peak One Cycle Non- Repetitive Surge Current	I <sub>FSM</sub>	8.3 ms, Sine pulse <sup>(1)</sup>	280	A
Junction Temperature	TJ	-	-55 to +200	°C
Storage Temperature	T <sub>stg</sub>	-	-55 to +200	°C

### **Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop	V <sub>F1</sub>	@ 15A, Pulse, T」 = 25 °C	0.84	V
	V <sub>F2</sub>	@ 15A, Pulse, T <sub>J</sub> = 125 °C	0.68	V
Reverse Current	I <sub>R1</sub>	@V <sub>R</sub> = 100V, Pulse,	0.35	mA
		T <sub>J</sub> = 25 °C		
	I <sub>R2</sub>	@V <sub>R</sub> = 100V, Pulse,	8	mA
		T <sub>J</sub> = 125 °C		
Junction Capacitance	Ст	@V <sub>R</sub> = 5V, T <sub>C</sub> = 25 °C	600	pF
		f <sub>SIG</sub> = 1MHz,		
		V <sub>SIG</sub> = 50mV (p-p)		

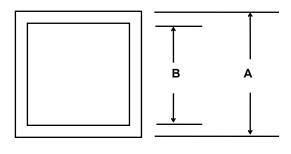
(1) in SHD package

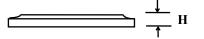
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#### Mechanical Dimensions: In Inches (mm)





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)

Α	В
0.125 ± 0.003(3.18 ± 0.08)	0.116 ± 0.003(2.95 ± 0.08)

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