

#### TECHNICAL DATA DATA SHEET D0085 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 <sub>RWM</sub>	-	30	V
Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle, rectangular wave form	3	A
Peak One Cycle Non- Repetitive Surge Current	I <sub>FSM</sub>	8.3 ms, Sine pulse <sup>(1)</sup>	55	A
Junction Temperature	TJ	-	-55 to +150	°C
Storage Temperature	T <sub>stg</sub>	-	-55 to +150	°C

# **Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop	V <sub>F1</sub>	@ 3A, Pulse, T <sub>J</sub> = 25 °C	0.49	V
	V <sub>F2</sub>	@ 3A, Pulse, T <sub>J</sub> = 125 °C	0.39	V
Reverse Current	I <sub>R1</sub>	$@V_R = 30V$ , Pulse,	0.4	mA
		T <sub>J</sub> = 25 °C		
	I <sub>R2</sub>	$@V_R = 30V$ , Pulse,	20	mA
		T <sub>J</sub> = 125 °C		
Junction Capacitance	Ст	@V <sub>R</sub> = 5V, T <sub>C</sub> = 25 °C	220	pF
		f <sub>SIG</sub> = 1MHz,		
		V <sub>SIG</sub> = 50mV (p-p)		

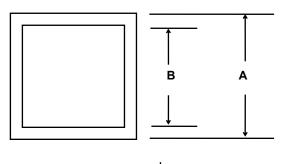
(1) in SHD package

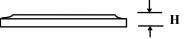
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#### Mechanical Dimensions: In Inches ( mm )





Bottom side metallization Ag thickness is 5KA minimum Top side metallization Al thickness is 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	
$0.060 \pm 0.003 (1.52 \pm 0.08)$	$0.054 \pm 0.003 (1.37 \pm 0.08)$	

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