

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_{RWM}	-	30	V
Average Forward Current	I _{F(AV)}	50% duty cycle, rectangular wave form	3	Α
Peak One Cycle Non- Repetitive Surge Current	I _{FSM}	8.3 ms, Sine pulse (1)	55	Α
Junction Temperature	TJ	-	-55 to +150	°C
Storage Temperature	T _{stg}	-	-55 to +150	°C

Electrical Characteristics:

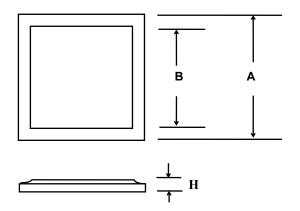
Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop	V _{F1}	@ 3A, Pulse, T _J = 25 °C	0.49	V
	V _{F2}	@ 3A, Pulse, T _J = 125 °C	0.39	V
Reverse Current	I _{R1}	@V _R = 30V, Pulse,	0.4	mA
		T _J = 25 °C		
	I _{R2}	@V _R = 30V, Pulse,	20	mA
		T _J = 125 °C		
Junction Capacitance	Ст	$@V_R = 5V, T_C = 25 ^{\circ}C$	220	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 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
$0.060 \pm 0.003 (1.52 \pm 0.08)$	$0.054 \pm 0.003 (1.37 \pm 0.08)$

[•] http://www.smc-diodes.com - sales@ smc-diodes.com •



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