

TECHNICAL DATA DATA SHEET D0119 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	٧
Average Forward Current	I _{F(AV)}	50% duty cycle, rectangular wave form	30	Α
Peak One Cycle Non- Repetitive Surge Current	I _{FSM}	8.3 ms, Sine pulse (1)	570	Α
Junction Temperature	TJ	-	-55 to +175	°C
Storage Temperature	T _{stg}	-	-55 to +175	°C

Electrical Characteristics:

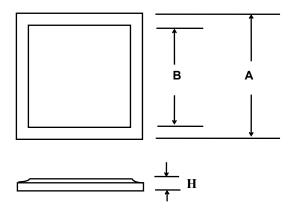
Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop	V _{F1}	@ 30A, Pulse, T _J = 25 °C	0.64	V
	V _{F2}	@ 30A, Pulse, T _J = 125 °C	0.57	V
Reverse Current	I _{R1}	@V _R = 45V, Pulse,	0.8	mA
		T _J = 25 °C		
	I _{R2}	@V _R = 45V, Pulse,	30	mA
		T _J = 125 °C		
Junction Capacitance C _T		$@V_R = 5V, T_C = 25 °C$	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 Ag-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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