

TECHNICAL DATA DATA SHEET 4026, Rev.A.1

# 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 150 Volt Ultrafast Rectifiers

# **Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	-	150	V
Max. Average Forward	$I_{F(AV)}$	50% duty cycle, rectangular	60	Α
Current	, ,	wave form		
Max. Peak One Cycle Non-	I <sub>FSM</sub>	8.3 ms, Sine pulse (1)	860	Α
Repetitive Surge Current				
Max. Junction Temperature	$T_J$	-	-65 to +200	°C
Max. Storage Temperature	$T_{stg}$	-	-65 to +200	°C

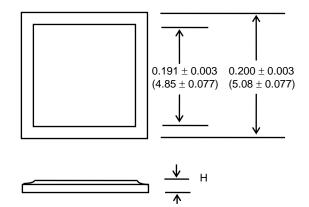
## **Electrical Characteristics:**

Characteristics	<b>Symbol</b>	Condition	Max.	Units
Max. Forward Voltage Drop	$V_{F1}$	@ 60A, Pulse, T <sub>J</sub> = 25 °C	0.92	V
	$V_{F2}$	@ 60A, Pulse, T <sub>J</sub> = 125 °C	0.79	V
Max. Reverse Current	I <sub>R1</sub>	@V <sub>R</sub> = 150V, Pulse,	1.5	mA
		$T_J = 25  ^{\circ}C$		
	I <sub>R2</sub>	@V <sub>R</sub> = 150V, Pulse,	24	mA
		T <sub>J</sub> = 125 °C		
Max. Junction Capacitance	C <sub>T</sub>	$@V_R = 5V, T_C = 25  ^{\circ}C$	1500	pF
		$f_{SIG} = 1MHz,$		
		$V_{SIG} = 50 \text{mV (p-p)}$		

(1) in SHD package

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## Mechanical Dimensions: In Inches / mm



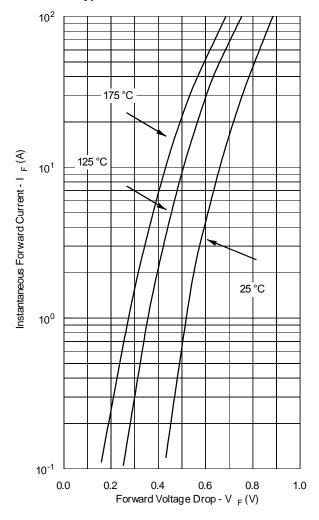
Bottom side metalization Ti/Ni/Ag - 5 kÅ Ag minimum. Top side metalization Ti/Al - 25 kÅ Al or Ti/Ni/Ag - 30 kÅ Ag

Bottom side is cathode, top side is anode.

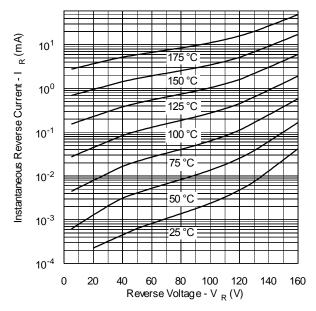
Dimension H =  $0.0105 \pm 0.001 (0.27 \pm 0.026)$  for Al top;

Dimension H = 0.0155  $\pm$  0.001 (0.39  $\pm$  0.026) for Ag top.

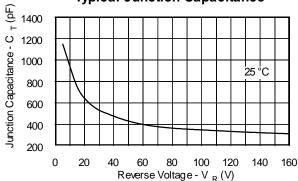
## Typical Forward Characteristics



## **Typical Reverse Characteristics**









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