

**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 Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form	5	A
Max. Peak One Cycle Non-Repetitive Surge Current	$I_{FSM}$	8.3 ms, Sine pulse <sup>(1)</sup>	70	A
Max. Junction Temperature	$T_J$	-	-65 to +200	°C
Max. Storage Temperature	$T_{stg}$	-	-65 to +200	°C

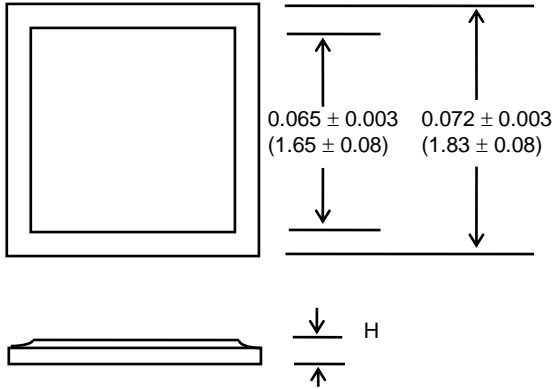
**Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	$V_{F1}$	@ 5 A, Pulse, $T_J = 25\text{ °C}$	0.89	V
	$V_{F2}$	@ 5 A, Pulse, $T_J = 125\text{ °C}$	0.74	V
Max. Reverse Current	$I_{R1}$	@ $V_R = 150V$ , Pulse, $T_J = 25\text{ °C}$	0.2	mA
	$I_{R2}$	@ $V_R = 150V$ , Pulse, $T_J = 125\text{ °C}$	3	mA
Max. Junction Capacitance	$C_T$	@ $V_R = 5V$ , $T_C = 25\text{ °C}$ $f_{SIG} = 1MHz$ , $V_{SIG} = 50mV$ (p-p)	180	pF

(1) in SHD package

**TECHNICAL DATA**  
**DATA SHEET 5113, REV A**

**Mechanical Dimensions: In Inches / mm**



Bottom side metalization Ag - 10 kÅ nominal.

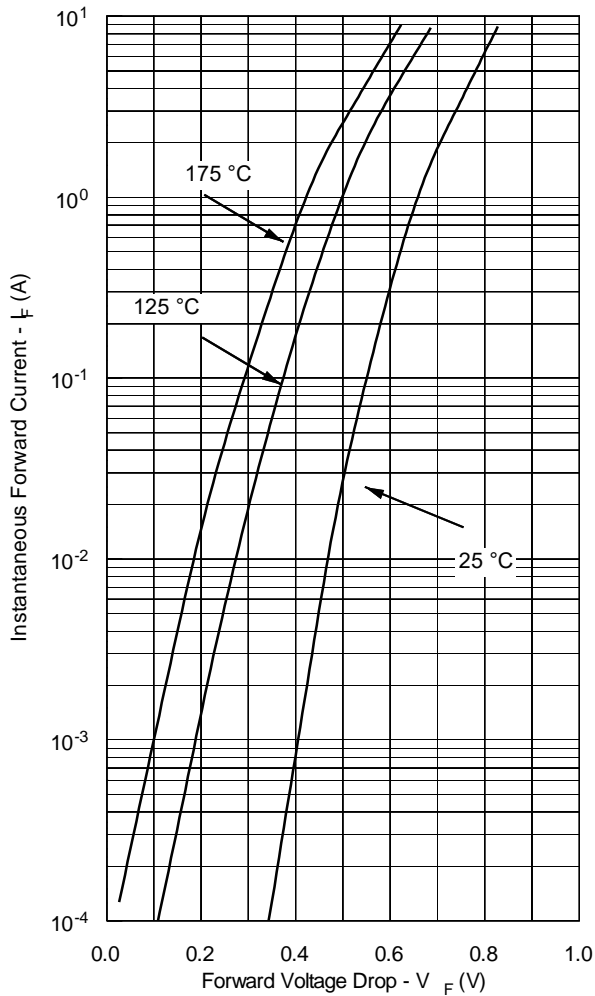
Top side metalization Al - 25 kÅ nominal  
 or Ag - 30 kÅ nominal.

Bottom side is cathode, top side is anode.

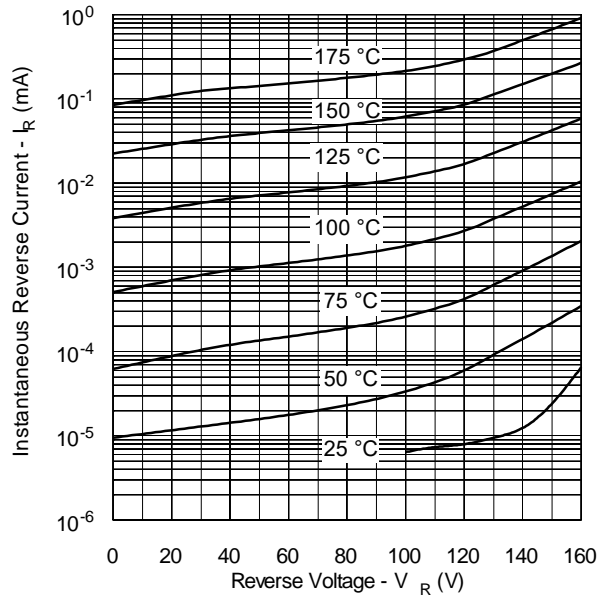
Dimension H =  $0.0105 \pm 0.001$  (0.27 ± 0.026) for Al top;

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

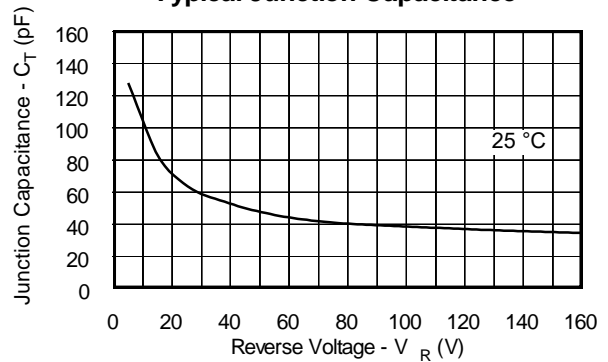
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



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**TECHNICAL DATA**  
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