TECHNICAL DATA
DATA SHEET D0052 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}	-	100	V
Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form	1	A
Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, Sine pulse (1)	20	A
Junction Temperature	T_J	-	-55 to +175	°C
Storage Temperature	T_{stg}	-	-55 to +175	°C

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop	V_{F1}	@ 1A, Pulse, T_J = 25 °C	0.84	V
	V_{F2}	@ 1A, Pulse, T_J = 125 °C	0.70	V
Reverse Current	I_{R1}	@V_R = 100V, Pulse, T_J = 25 °C	0.03	mA
	I_{R2}	@V_R = 100V, Pulse, T_J = 125 °C	0.6	mA
Junction Capacitance	C_T	@V_R = 5V, T_C = 25 °C f_{SIG} = 1MHz, V_{SIG} = 50mV (p-p)	35	pF

(1) in SHD package

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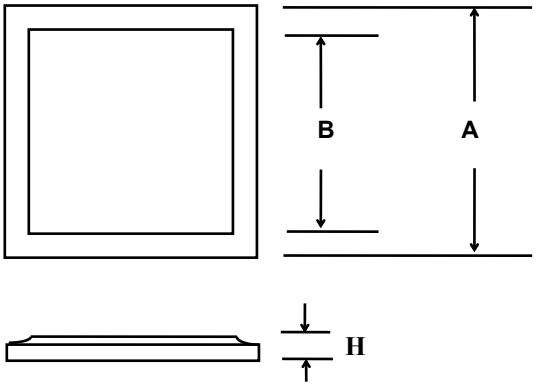
Mechanical Dimensions: In Inches （ mm ）



Bottom side metallization Ag thickness is 5KA
Top side metallization Al thickness is 25KA
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)

A	B
0.040 ± 0.003(1.02 ± 0.08)	0.034 ± 0.003(0.86 ± 0.08)

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Figure1
Typical Forward Characteristics

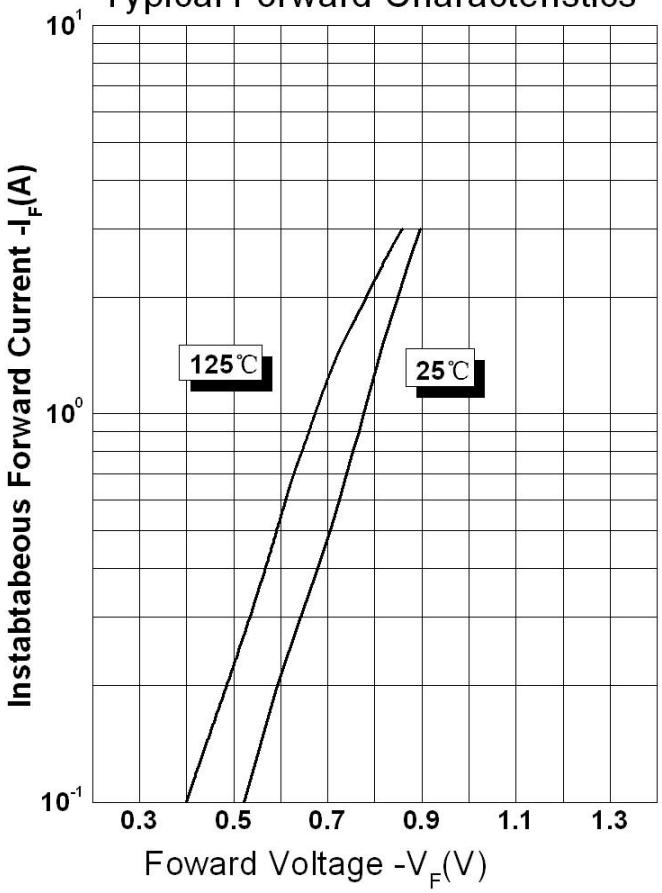


Figure 2
Typical Reverse Characteristics

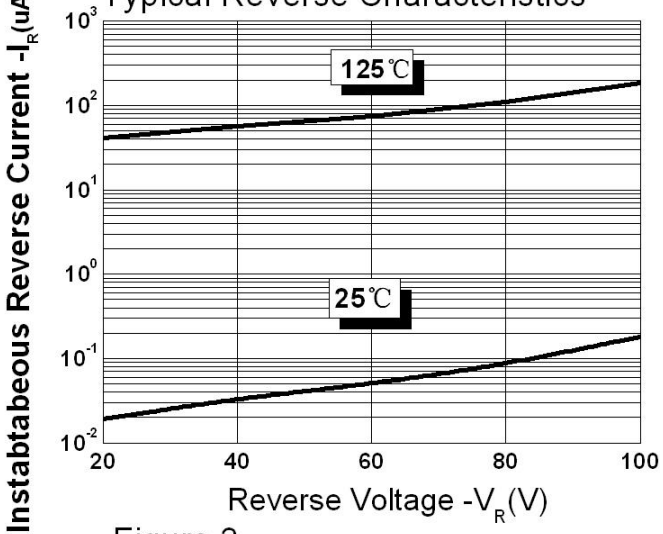
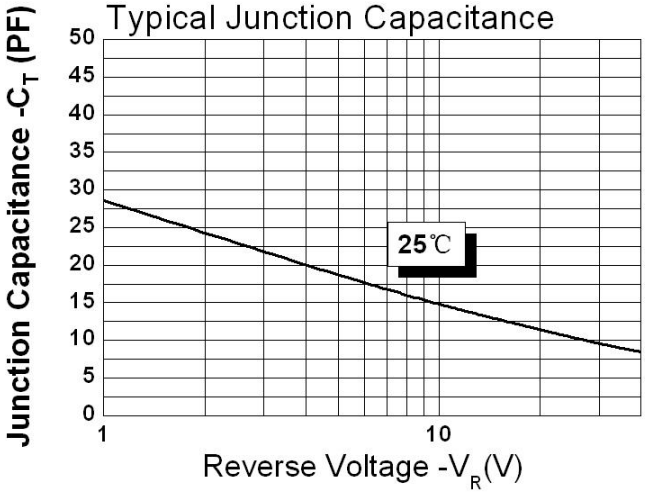


Figure 3
Typical Junction Capacitance



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