

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

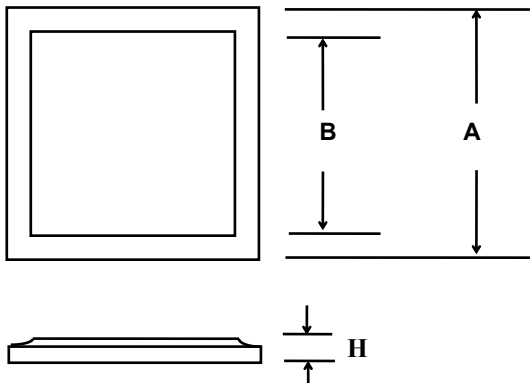
Electrical Characteristics:

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

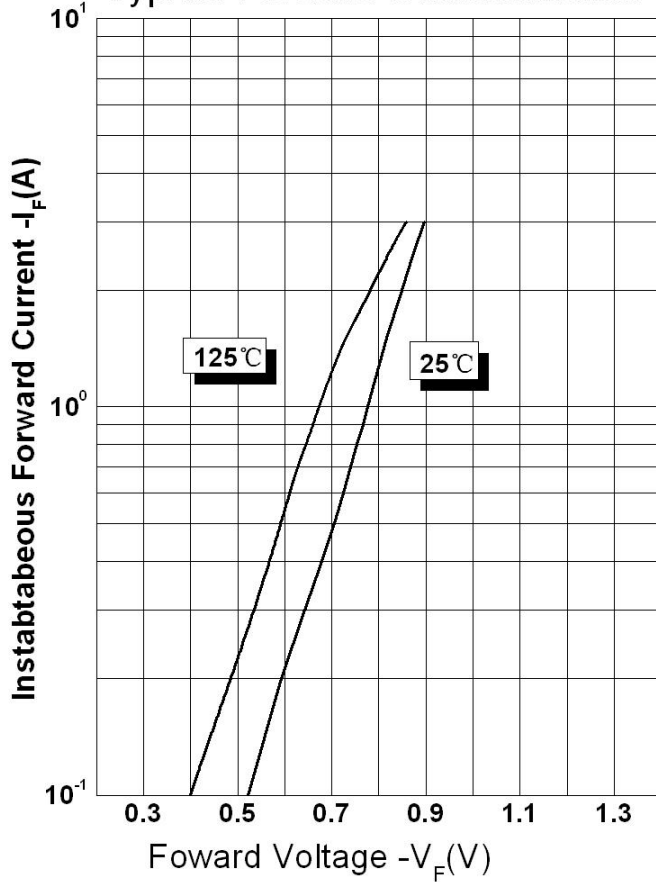


Figure 2
Typical Reverse Characteristics

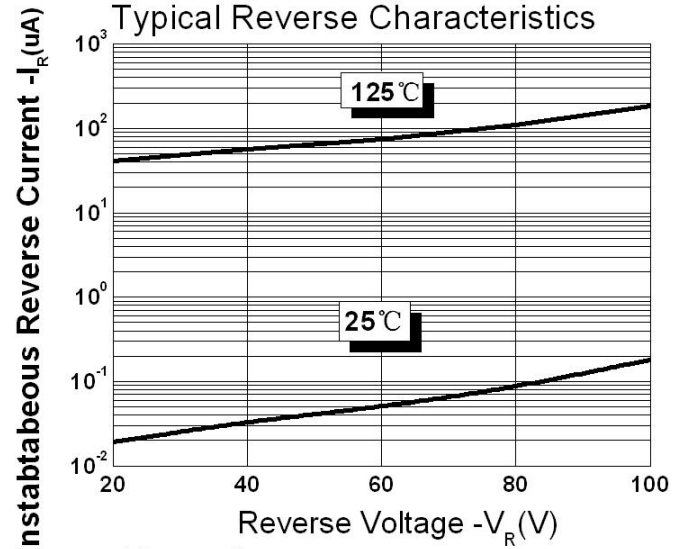
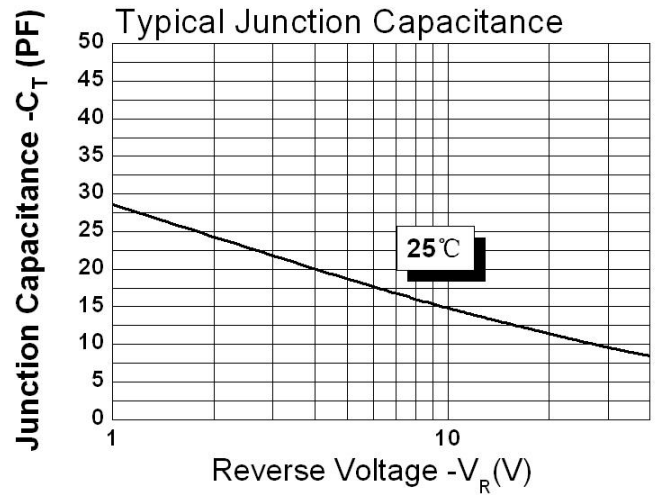


Figure 3
Typical Junction Capacitance



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