

**TECHNICAL DATA**  
**DATA SHEET D0027 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 @ $T_C = 75^\circ\text{C}$ , rectangular wave form	60	A
Peak One Cycle Non- Repetitive Surge Current	$I_{FSM}$	10 ms, Sine pulse <sup>(1)</sup>	860	A
Junction Temperature	$T_J$	-	-55 to +200	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-	-55 to +200	$^\circ\text{C}$

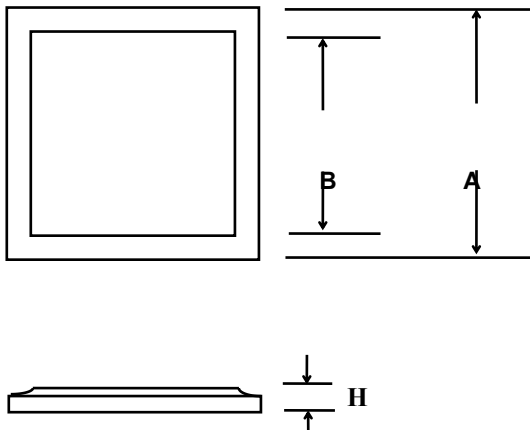
### Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop	$V_{F1}$	@ 7.62mA, Pulse, $T_A = 25^\circ\text{C}$	0.41	V
	$V_{F2}$	@ 60 A, Pulse, $T_A = 25^\circ\text{C}$	0.87	V
	$V_{F3}$	@ 60 A, Pulse, $T_A = 125^\circ\text{C}$	0.72	V
Reverse Current (per leg) *	$I_{R1}$	@ $V_R = \text{rated } V_R$ $T_J = 25^\circ\text{C}$	0.1	mA
	$I_{R2}$	@ $V_R = \text{rated } V_R$ $T_J = 125^\circ\text{C}$	24	mA
Junction Capacitance (per leg)	$C_T$	@ $V_R = 5\text{V}$ , $T_C = 25^\circ\text{C}$ $f_{SIG} = 100\text{KHz} - 1\text{MHz}$	1500	pF

(1) in SHD package

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**Mechanical Dimensions: In Inches ( mm )**



Bottom side metalization Ni-1000±10%nm  
Ag-200±10%nm

Top side metalization Al -5±10%um

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
0.200 ± 0.003(5.08 ± 0.08)	0.192 ± 0.003(4.88 ± 0.08)

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