# 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 |  | Max. |  |
| :--- | :---: | :---: | :---: | :---: |
| Peak Inverse Voltage | $\mathrm{V}_{\mathrm{RWM}}$ | - | 60 | V |
| Average Forward Current | $\mathrm{I}_{\mathrm{F}(\mathrm{AV})}$ | 50\% duty cycle, rectangular <br> wave form | 1 | A |
| Peak One Cycle Non- <br> Repetitive Surge Current | $\mathrm{I}_{\mathrm{FSM}}$ | 8.3 ms , Sine pulse ${ }^{(1)}$ | 20 | A |
| Junction Temperature | $\mathrm{T}_{J}$ | - | -55 to +150 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature | $\mathrm{T}_{\text {stg }}$ | - | -55 to +150 | ${ }^{\circ} \mathrm{C}$ |

Electrical Characteristics:

| Characteristics | Symbol | Condition | Max. | Units |
| :---: | :---: | :---: | :---: | :---: |
| Forward Voltage Drop | $V_{F 1}$ | @ 1A, Pulse, $\mathrm{T}_{\mathrm{J}}=25^{\circ} \mathrm{C}$ | 0.65 | V |
|  | $\mathrm{V}_{\mathrm{F} 2}$ | @ 1A, Pulse, $\mathrm{T}_{\mathrm{J}}=125^{\circ} \mathrm{C}$ | 0.60 | V |
| Reverse Current | $\mathrm{I}_{\mathrm{R} 1}$ | $\begin{aligned} & @ V_{R}=60 \mathrm{~V}, \text { Pulse, } \\ & T_{J}=25^{\circ} \mathrm{C} \\ & \hline \end{aligned}$ | 0.1 | mA |
|  | $\mathrm{I}_{\mathrm{R} 2}$ | $\begin{aligned} & @ V_{R}=60 \mathrm{~V}, \text { Pulse, } \\ & \mathrm{T}_{J}=125^{\circ} \mathrm{C} \\ & \hline \end{aligned}$ | 9 | mA |
| Junction Capacitance | $\mathrm{C}_{\text {T }}$ | $\begin{aligned} & @ V_{\mathrm{R}}=5 \mathrm{~V}, \mathrm{TC}=25^{\circ} \mathrm{C} \\ & \mathrm{f}_{\text {SIG }}=1 \mathrm{MHz}, \\ & \mathrm{~V}_{\text {SIG }}=50 \mathrm{mV}(\mathrm{p}-\mathrm{p}) \\ & \hline \end{aligned}$ | 53 | pF |

(1) in SHD package

## Mechanical Dimensions: In Inches ( mm )



Bottom side metallization Ag thickness is 5KA minimum Top side metallization Al thickness is 25 KA minimum Bottom side is cathode, top side is anode

Dimension H $=0.0105 \pm 0.001$ ( $0.27 \pm 0.026$ ) (It can be customized according to customer requirements)


## B

$0.040 \pm 0.003(1.02 \pm 0.08)$
$0.034 \pm 0.003(0.86 \pm 0.08)$

## TECHNICAL DATA <br> DATA SHEET D0064 REV. -


#### Abstract

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