

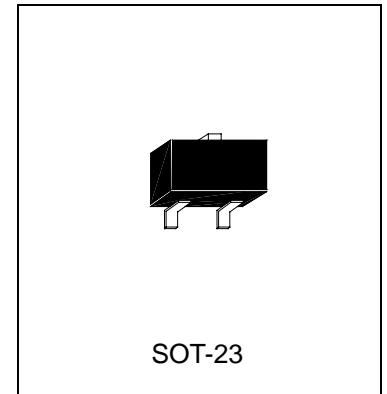


# HMBD4148

HIGH-SPEED SWITCHING DIODE

## Description

The HMBD4148 is designed for high-speed switching application in hybrid thick-and thin-film circuits. The devices is manufactured by the silicon epitaxial planar process and packed in plastic surface mount package.



## Features

- Small SMD Package (SOT-23)
- Ultra-high Speed
- Low Forward Voltage
- Fast Reverse Recovery Time

## Absolute Maximum Ratings

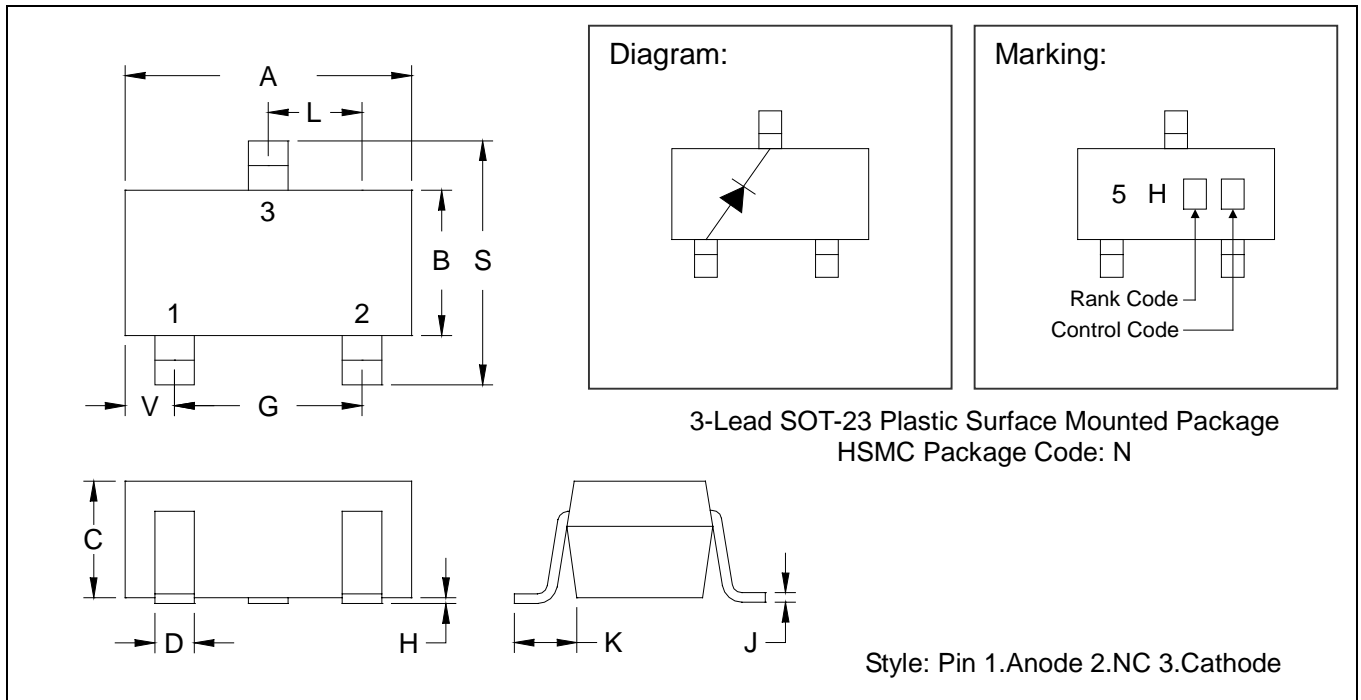
- Maximum Temperatures  
 Storage Temperature ..... -65 ~ +150 °C  
 Junction Temperature ..... +150 °C
- Maximum Power Dissipation  
 Total Power Dissipation (Ta=25°C)..... 225 mW
- Maximum Voltages and Currents (Ta=25°C)  
 Continuous Reverse Voltage ..... 70 V  
 Continuous Forward Current..... 200 mA  
 Peak Forward Surge Current ..... 500 mA

## Characteristics (Ta=25°C)

Characteristic	Symbol	Condition	Min	Max	Unit
Forward Voltage	VF	IF=10mA	-	1	V
Reverse Breakdown	VR	IR=100uA	100	-	V
Reverse Current	IR	VR=75V	-	5	uA
Total Capacitance	CT	VR=0, F=1MHz	-	4	pF
Reverse Recovery Time	Trr	IF=IR=10mA, RL=100Ω Measured at IR=1mA	-	4	nS



### SOT-23 Dimension



\*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1102	0.1204	2.80	3.04	J	0.0034	0.0070	0.085	0.177
B	0.0472	0.0630	1.20	1.60	K	0.0128	0.0266	0.32	0.67
C	0.0335	0.0512	0.89	1.30	L	0.0335	0.0453	0.85	1.15
D	0.0118	0.0197	0.30	0.50	S	0.0830	0.1083	2.10	2.75
G	0.0669	0.0910	1.70	2.30	V	0.0098	0.0256	0.25	0.65
H	0.0005	0.0040	0.013	0.10					

- Notes: 1.Dimension and tolerance based on our Spec. dated Sep. 07,1997.  
 2.Controlling dimension: millimeters.  
 3.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.  
 4.If there is any question with packing specification or packing method, please contact your local HSMC sales office.

**Material:**

- Lead: 42 Alloy; solder plating
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

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