

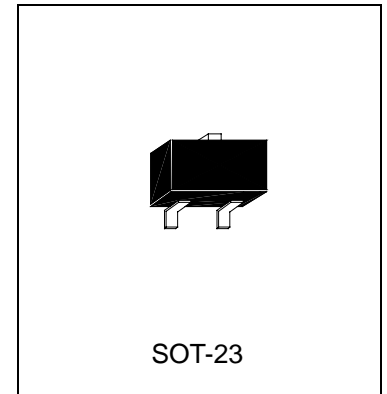


HMBD4148

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

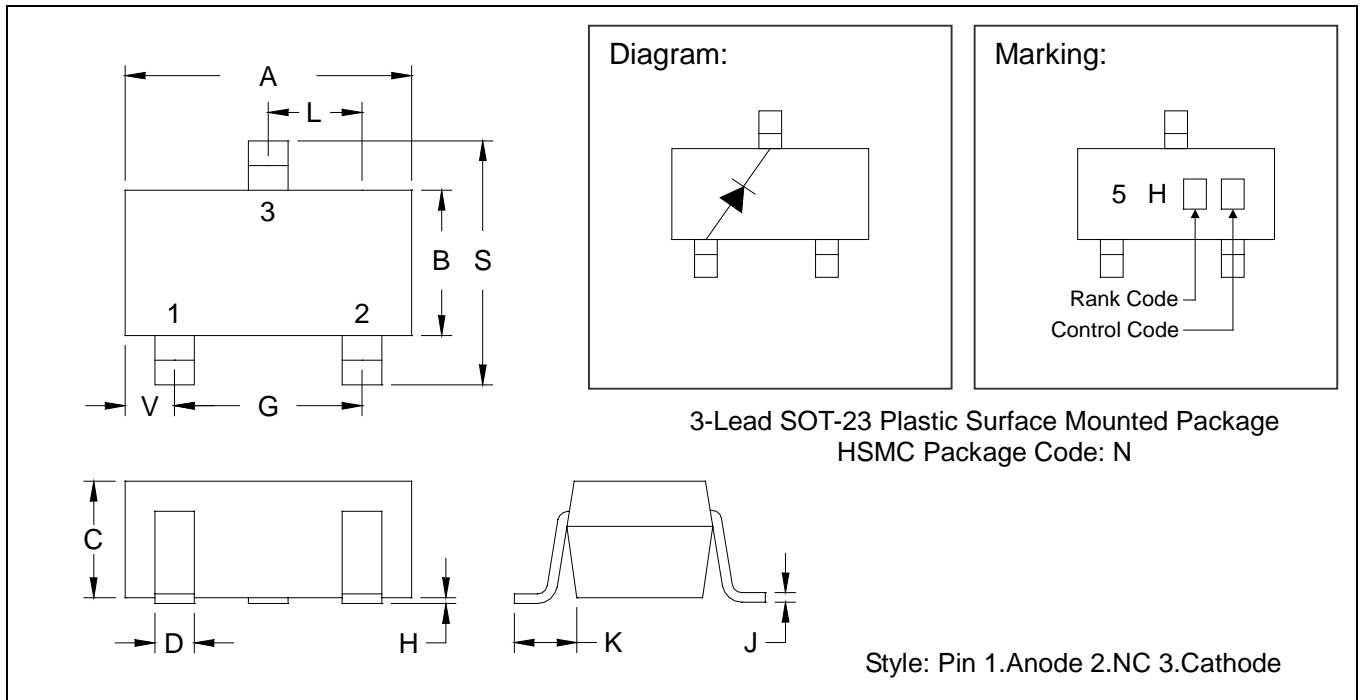
- Maximum Temperatures
 Storage Temperature -65 ~ +150 °C
 Junction Temperature +150 °C
- Maximum Power Dissipation
 Total Power Dissipation (Ta=25°C)..... 225 mW
- Maximum Voltages and Currents (Ta=25°C)
 Continuous Reverse Voltage 70 V
 Continuous Forward Current..... 200 mA
 Peak Forward Surge Current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