

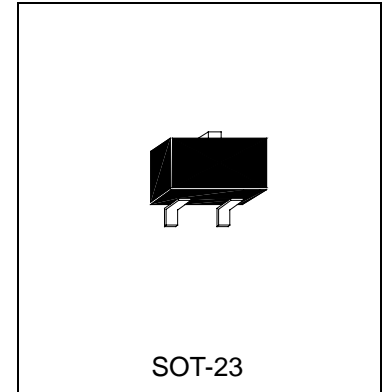


HBAV70

SWITCHING DIODE

Description

The HBAV70 consists of two diodes in a plastic surface mount package. The diodes are connected in series and the unit is designed for high-speed switching application in hybrid thick and thin-film circuits.



Features

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

Absolute Maximum Ratings

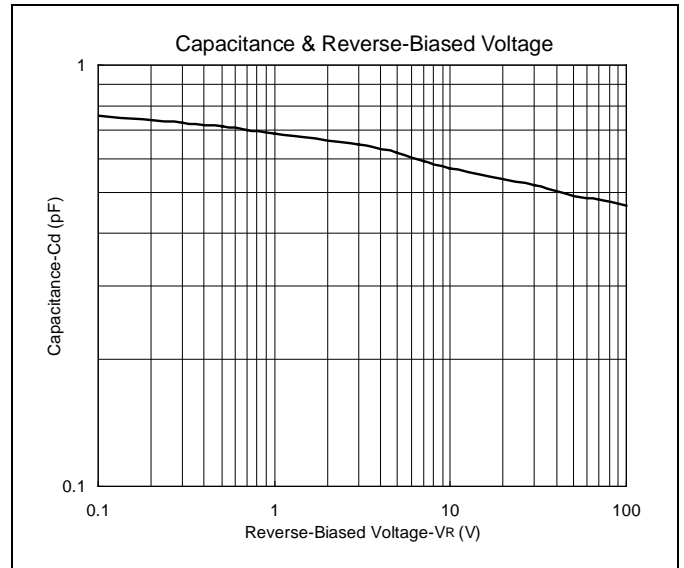
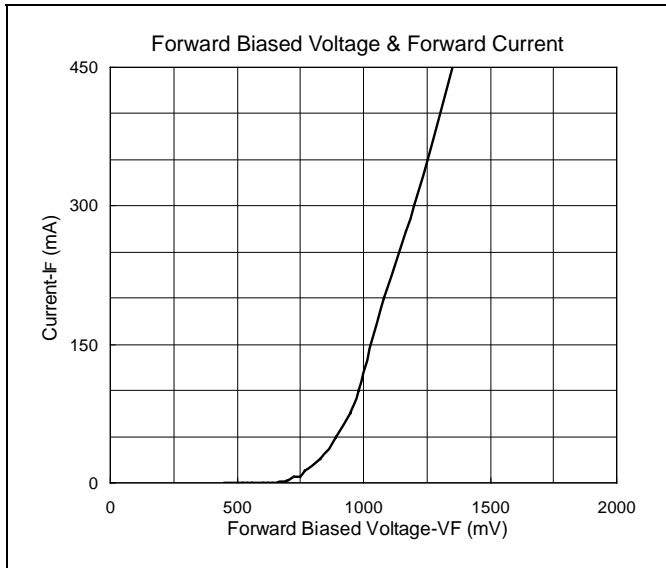
- Maximum Temperatures
Storage Temperature -65 ~ +150 °C
Junction Temperature +150 °C
- Maximum Power Dissipation
Total Power Dissipation (Ta=25°C) 250 mW
- Maximum Voltages and Currents (Ta=25°C)
Reverse Voltage 70 V
Forward Current 200 mA
Repetitive Forward Current 500 mA

Characteristics (Ta=25°C)

Characteristic	Symbol	Condition	Min	Max	Unit
Reverse Breakdown Voltage	V(BR)	IR=100uA	70	-	V
Forward Voltage	VF(1)	IF=1mA	-	715	mV
	VF(2)	IF=10mA	-	855	mV
	VF(3)	IF=50mA	-	1100	mV
	VF(4)	IF=100mA	-	1300	mV
Reverse Current	IR	VR=70	-	5	uA
Total Capacitance	CT	VR=0, f=1MHz	-	1.5	pF
Reverse Recovery Time	Trr	IF=IR=10mA, RL=100Ω measured at IR=1mA, VR=5V	-	15	nS

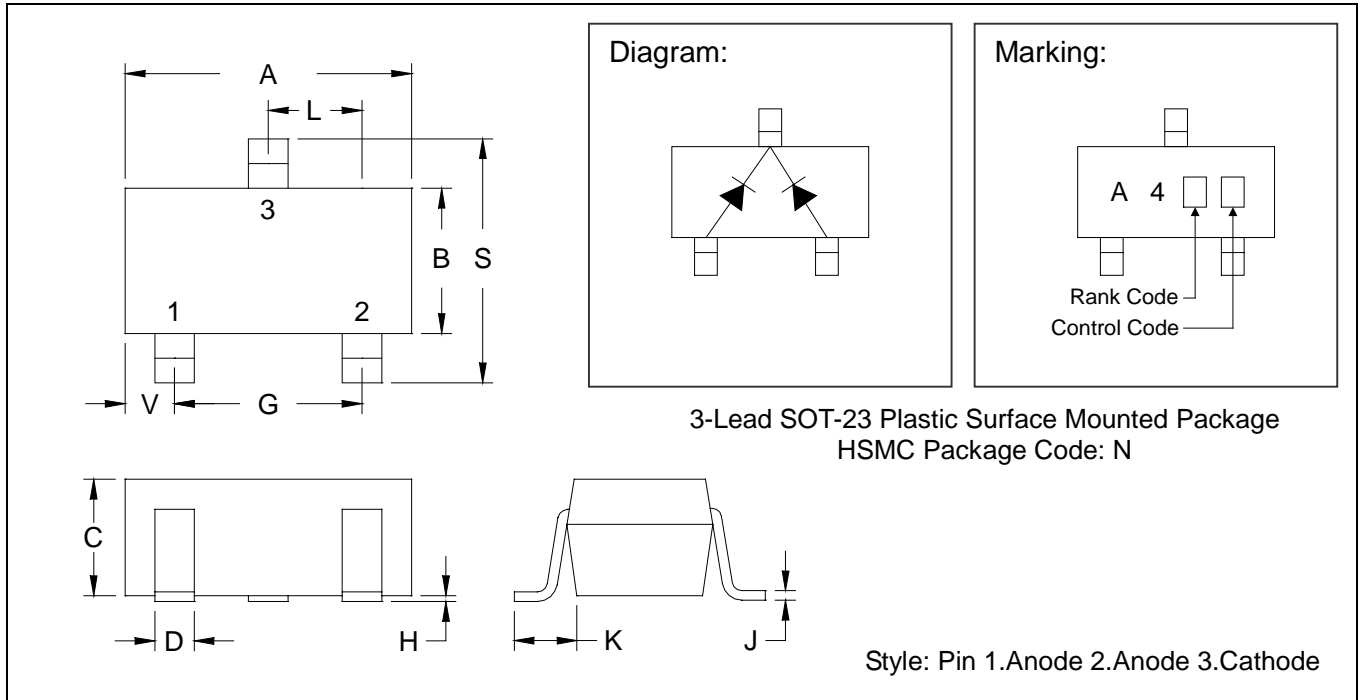


Characteristics Curve





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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