



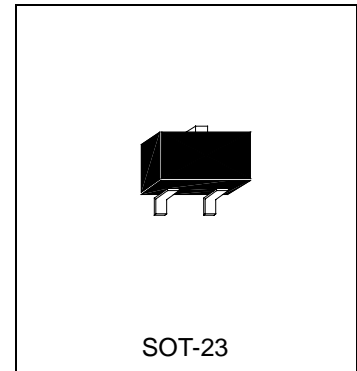
# HBAT54\A\C\S

## Description

Silicon Schottky Barrier Double Diodes

## Features

These diodes feature very low turn-on voltage and fast switching. There is a PN junction guard ring against excessive voltage such as electronics attic discharges protects these devices.



## Absolute Maximum Ratings

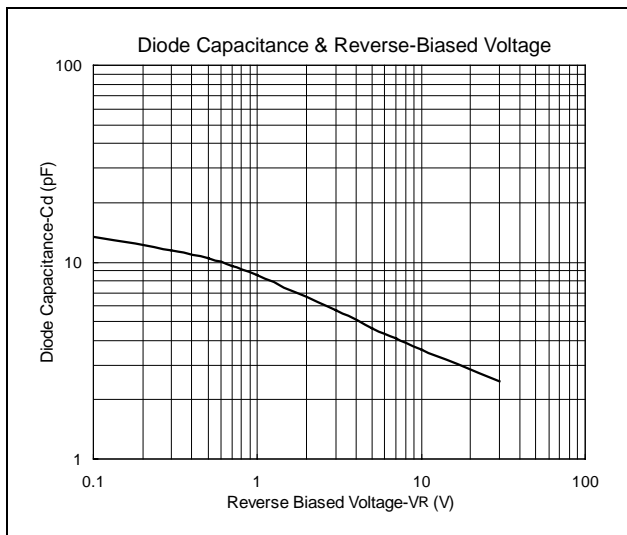
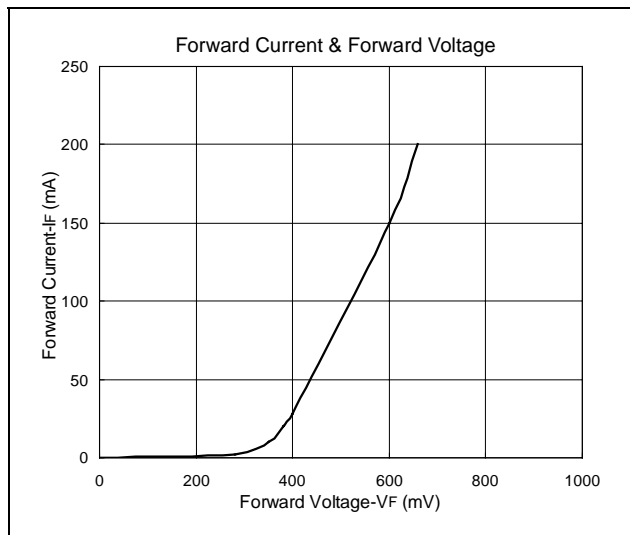
- Maximum Temperatures
  - Storage Temperature ..... -65~+125 °C
  - Junction Temperature ..... +125 °C
- Maximum Power Dissipation
  - Total Power Dissipation (Ta=25°C) ..... 230 mW
- Maximum Voltages and Currents (Ta=25°C)
  - Repetitive Peak Reverse Voltage ..... 30 V
  - Forward Continuous Current ..... 200 mA
  - Repetitive Peak Forward Current ..... 300 mA
  - Surge Forward Current (tp<1s)..... 600 mA

## Characteristics (Ta=25°C)

Characteristic	Symbol	Condition	Min.	Max.	Unit
Reverse breakdown Voltage	V(BR)R	IR=10uA	30	-	V
Forward Voltage	VF(1)	IF=0.1mA	-	240	mV
	VF(2)	IF=1mA	-	320	mV
	VF(3)	IF=10mA	-	400	mV
	VF(4)	IF=30mA	-	500	mV
	VF(5)	IF=100mA	-	1000	mV
Reverse Current	IR	VR=25V	-	2.0	uA
Total Capacitance	CT	VR=1V, f=1MHz	-	10	pF
Reverse Recovery Time	Trr	IF=IR=10mA RL=100Ω measured at IR=1mA	-	5	nS

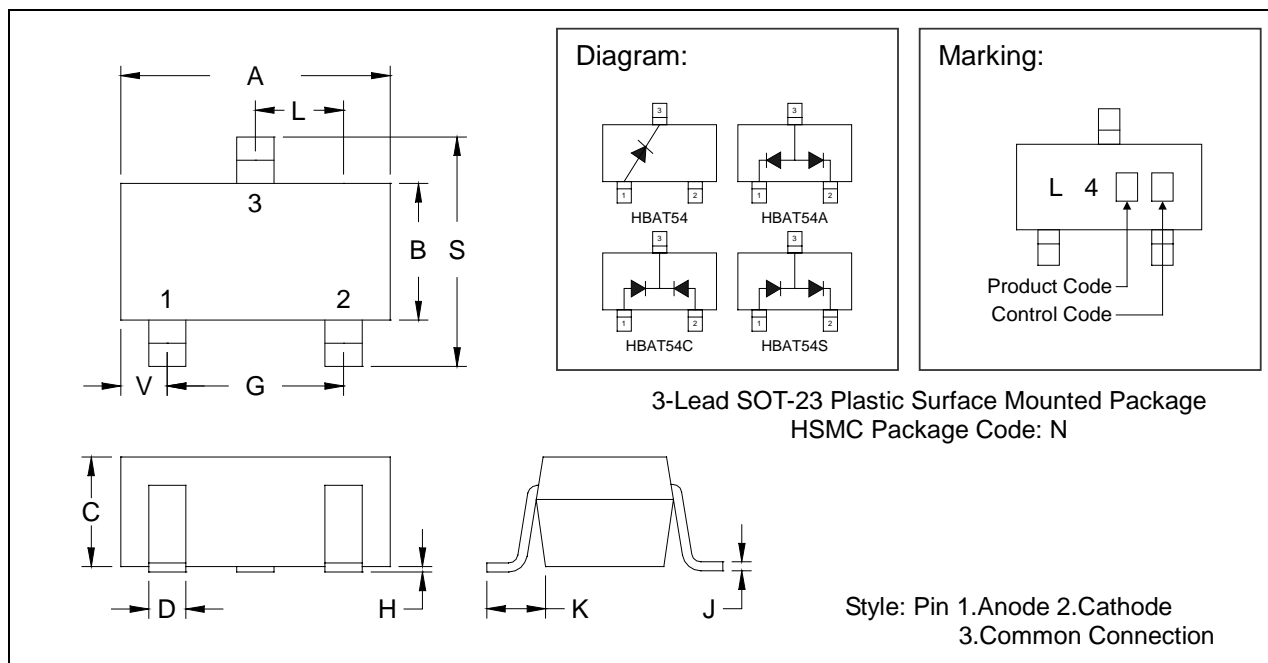


## Characteristics Curve





### SOT-23 Dimension



- HBAT54: Single Diode , also available as double diodes. (Marking Code L4)
- HBAT54A: Common Anode. (Marking Code L42)
- HBAT54C: Common Cathode. (Marking Code L43)
- HBAT54S: Series Connected. (Marking Code L44)

\*: 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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