



## Features

Extremely Fast Switching Speed  
Low Forward Voltage  
Pb-Free Package is Available



SOD-323



## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
NSVBAT54HT1G	SOD-323	L9	3000

## Maximum Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Rating	Unit
Reverse Voltage	V <sub>RM</sub>	30	V
Forward Current	I <sub>F</sub>	200	
Repetitive Peak Forward Current	I <sub>FRM</sub>	300	mA
Non-Repetitive Peak Forward Current (t < 1s)	I <sub>FSM</sub>	600	
Power Dissipation	P <sub>d</sub>	200	mW
-Derate above 25°C		1.57	mW/°C
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	635	°C/W
Junction Temperature	T <sub>J</sub>	150	
Storage Temperature range	T <sub>stg</sub>	-55 to 150	°C

## Electrical Characteristics (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V <sub>R</sub>	I <sub>R</sub> = 10 uA	30			V
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 0.1 mA			0.24	
		I <sub>F</sub> = 1 mA			0.32	
		I <sub>F</sub> = 10 mA			0.4	
		I <sub>F</sub> = 30 mA			0.5	
		I <sub>F</sub> = 100 mA			0.8	
Reverse voltage leakage current	I <sub>R</sub>	V <sub>R</sub> = 25 V			2	uA
Junction capacitance	C <sub>j</sub>	V <sub>R</sub> = 1 V, f= 1 MHz			10	pF
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>R</sub> (REC) = 1mA			5	ns



## Typical Characteristics

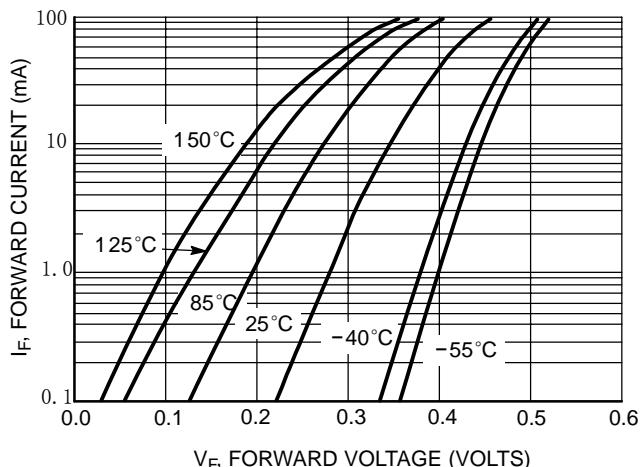


Figure 1. Forward Voltage

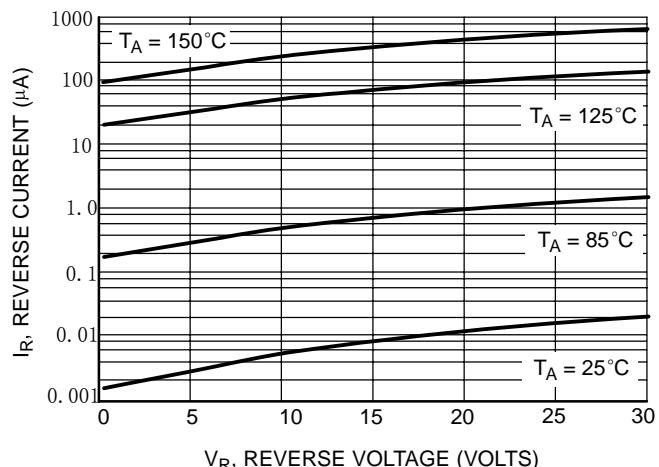


Figure 2. Leakage Current

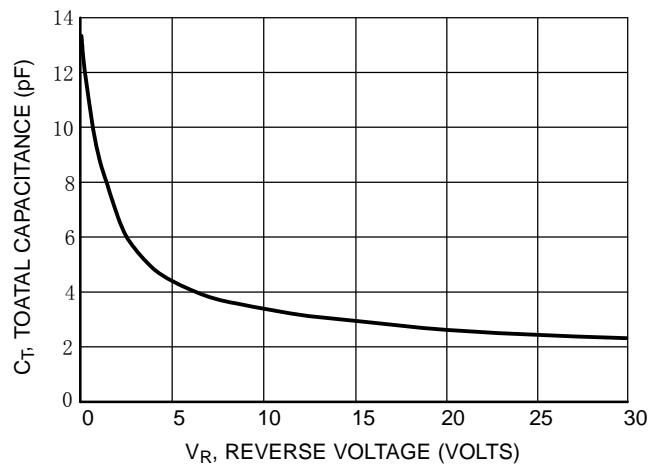
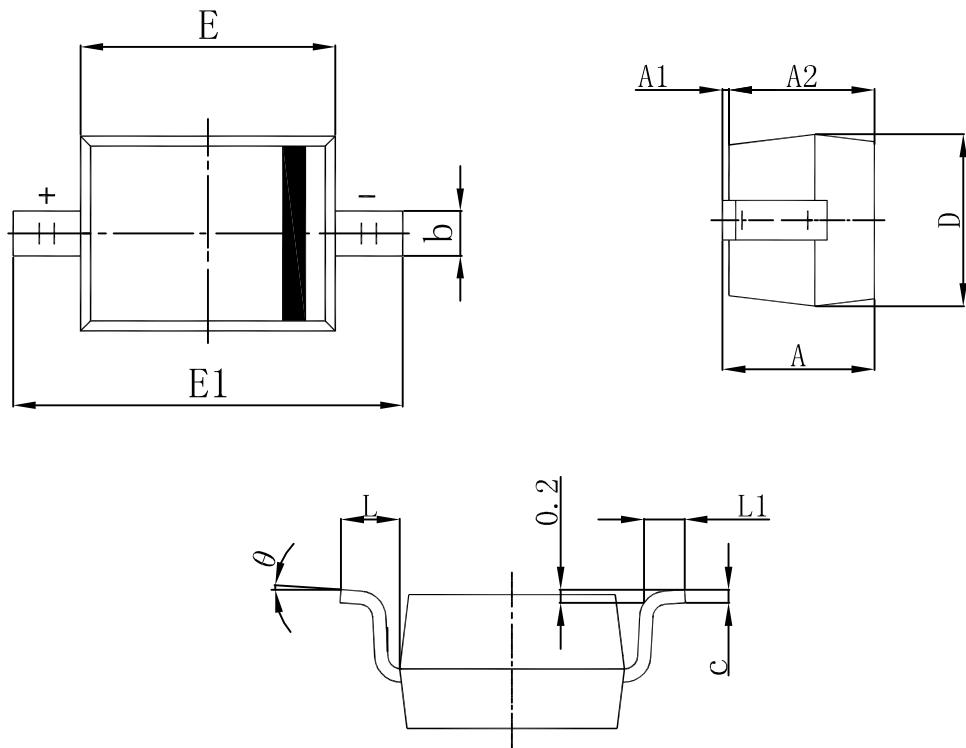


Figure 3. Total Capacitance



### SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.100		0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°



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