



## SSCSBAS316D2

### Fast Switching Diode

#### ● Features

- ✧ Fast Switching Speed
- ✧ Ultra-Small Surface Mount Package
- ✧ Low Reverse Leakage Current
- ✧ Ideal for Battery Powered Portable Applications
- ✧ RoHS Compliant/Green EMC
- ✧ Moisture Sensitivity: Level 3 per J-STD-020

#### ● PIN configuration



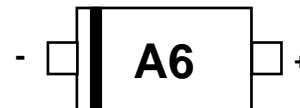
**SOD-323**



**Circuit Diagram**

#### ● Applications

- ✧ High speed switching for detection
- ✧ Battery Powered Portable
- ✧ Mobile phones, laptops and other electronic devices



**Marking (Top View)**

#### ● Absolute maximum rating @T<sub>A</sub>=25°C

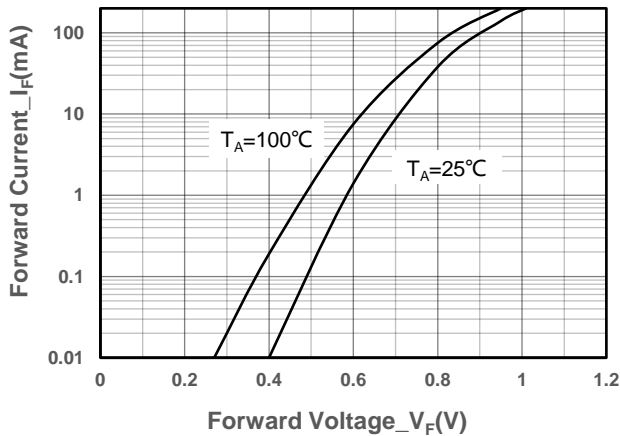
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	100	V
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>		
Working Peak Reverse Voltage	V <sub>RWM</sub>	100	V
Reverse Voltage(DC)	V <sub>R</sub>		
Average Rectified Forward Current	I <sub>O</sub>	250	mA
Non-Repetitive Peak Forward Surge Current@ t=8.3ms	I <sub>FSM</sub>	2	A
Power Dissipation	P <sub>D</sub>	250	mW
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	500	°C/W
Operating Temperature	T <sub>J</sub>	-55 ~ +150	°C
Storage Temperature	T <sub>STG</sub>	-55 ~ +150	°C



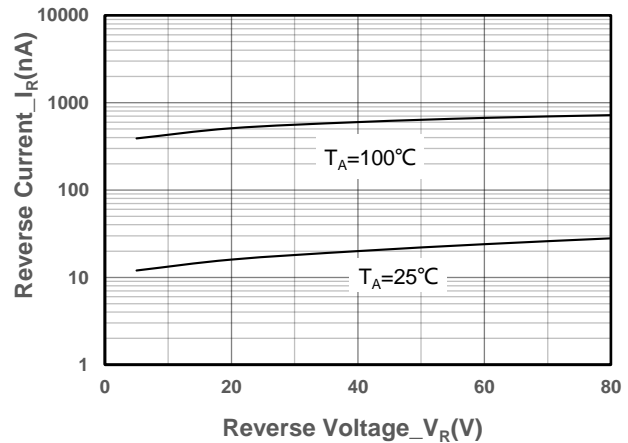
## ● Electrical Characteristics @T<sub>A</sub>=25°C

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	V <sub>R1</sub>	I <sub>R</sub> = 100μA	100			V
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 1mA			0.715	V
		I <sub>F</sub> = 10mA			0.855	
		I <sub>F</sub> = 50mA			1	
		I <sub>F</sub> = 150mA			1.25	
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 20V			30	nA
		V <sub>R</sub> = 75V			1	μA
Total Capacitance	C <sub>T</sub>	V <sub>R</sub> = 0, f = 1MHz			1.5	pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> = I <sub>R</sub> = 10mA, I <sub>rr</sub> = 0.1 x I <sub>R</sub> , R <sub>L</sub> = 100Ω			4	ns

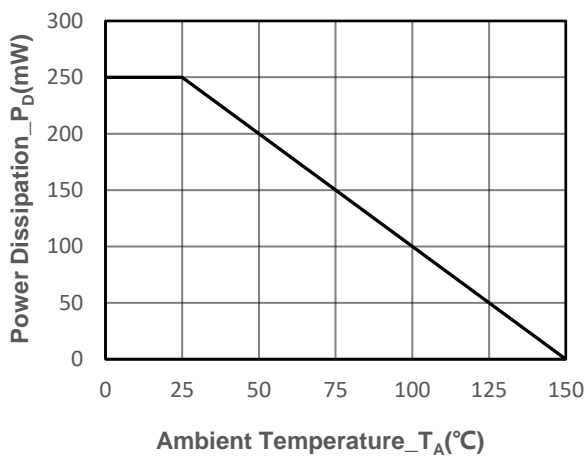
## ● Typical Performance Characteristics



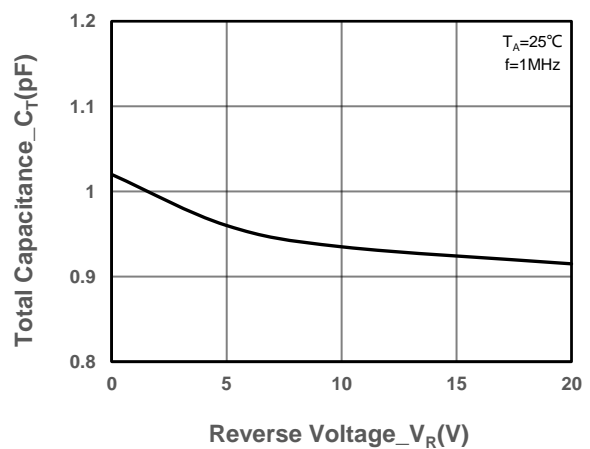
Forward Voltage vs. Forward Current



Reverse Voltage vs. Reverse Current



Power Derating vs. Ambient Temperature



Total Capacitance vs. Reverse Voltage



## ● Package Information

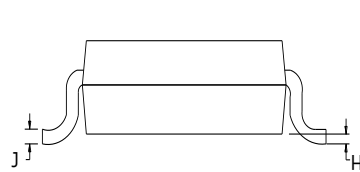
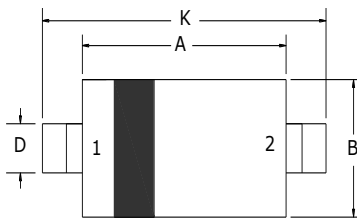
### Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCSBAS316D2	SOD-323	A6	3000	7 Inch

### Mechanical Data

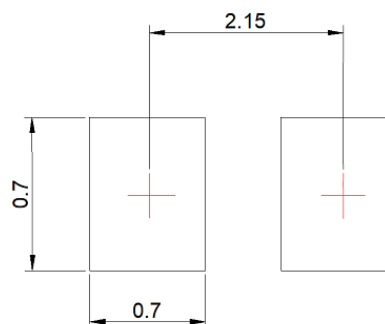
Case: SOD-323

Case Material: Molded Plastic. UL Flammability



Dim	Millimeters	
	Min	Max
A	1.60	1.80
B	1.2	1.40
C	0.80	0.90
D	0.25	0.35
E	0.15REF	
H	0	0.10
J	0.08	0.15
K	2.50	2.70

### Recommended Pad outline (Unit: mm)





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