



## SSCBAS20HD2

### 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>	200	V
Repetitive Peak Reverse Voltage	V <sub>R RM</sub>		
Working Peak Reverse Voltage	V <sub>R WM</sub>	200	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>	625	mA
Power Dissipation	P <sub>D</sub>	200	mW
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	625	°C/W
Operating Temperature	T <sub>J</sub>	-55 ~ +150	°C
Storage Temperature	T <sub>STG</sub>	-55 ~ +150	°C



## ● Electrical Characteristics @ $T_A=25^\circ\text{C}$

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	$V_{R1}$	$I_R = 100\mu\text{A}$	250			V
Forward Voltage	$V_F$	$I_F = 100\text{mA}$			1	V
		$I_F = 200\text{mA}$			1.25	
Reverse Current	$I_R$	$V_R = 200\text{V}$			1	nA
Total Capacitance	$C_T$	$V_R = 0, f = 1\text{MHz}$			5	pF
Reverse Recovery Time	$t_{rr}$	$I_F = I_R = 30\text{mA}$ , $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$			50	ns

## ● Typical Performance Characteristics

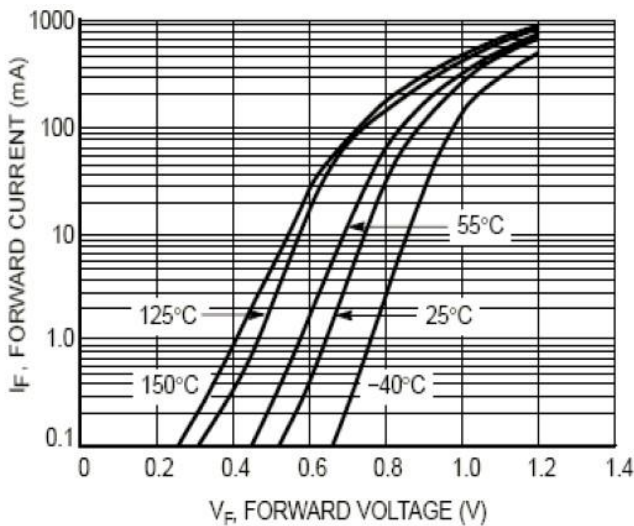


Figure 2. Forward Current

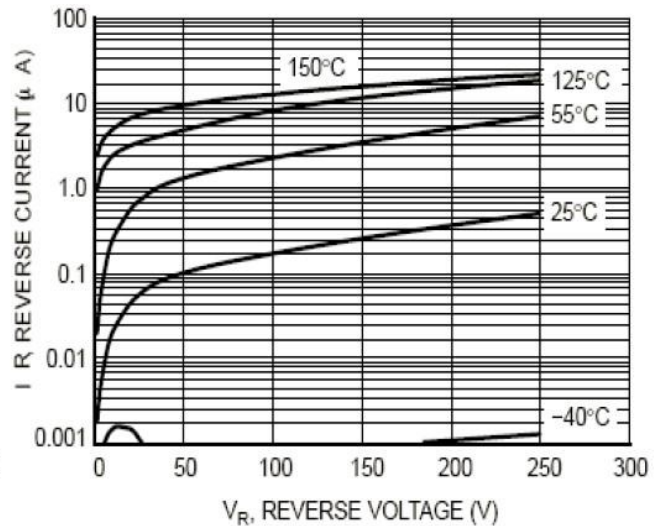


Figure 3. Leakage Current

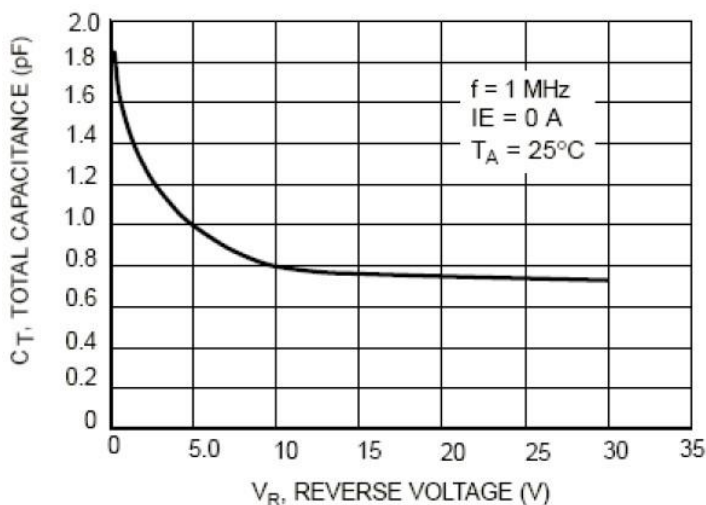


Figure 4. Total Capacitance



# SSCSBAS20HD2

## ● Package Information

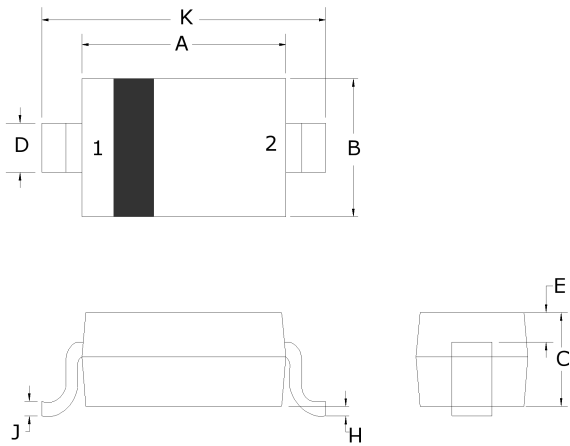
### Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCSBAS20HD2	SOD-323	JR	3000	7 Inch

### Mechanical Data

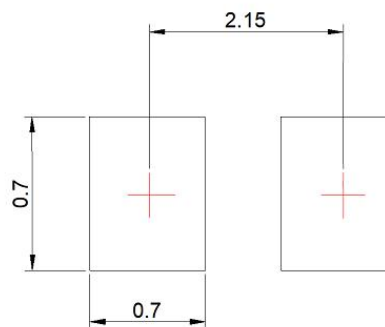
Case: SOD-323

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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