

## SOD323 Plastic-Encapsulate Diodes

### Schottky Rectifier

#### Features

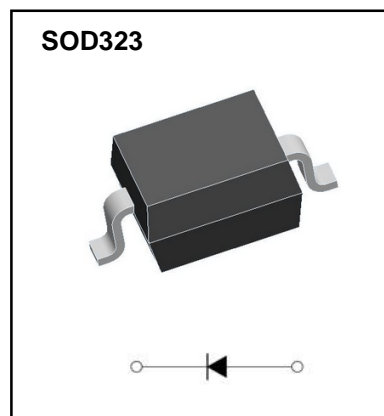
- Low Forward Voltage Drop
- Very Small SMD Package

#### Applications

- Low Voltage Rectification
- High Efficiency DC/DC Conversion
- Switch Mode Power Supply
- Inverse Polarity Protection
- Low Power Consumption Applications

#### Marking

- SH



#### Limiting Values (Absolute Maximum Rating)

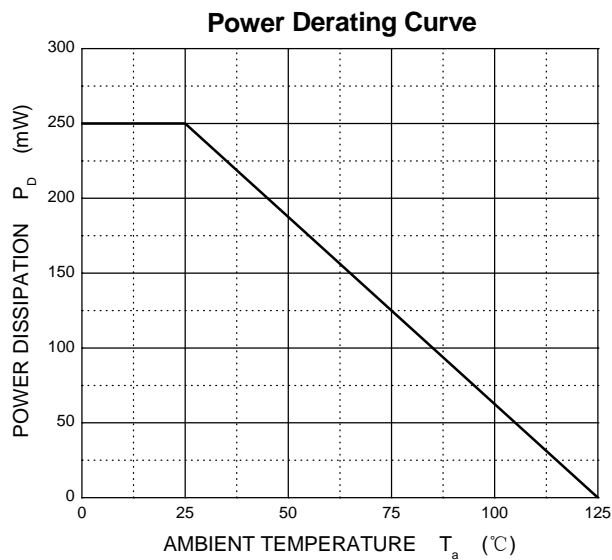
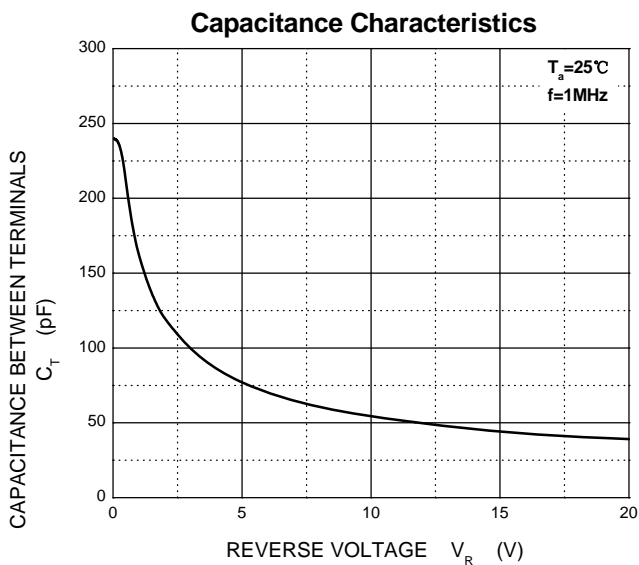
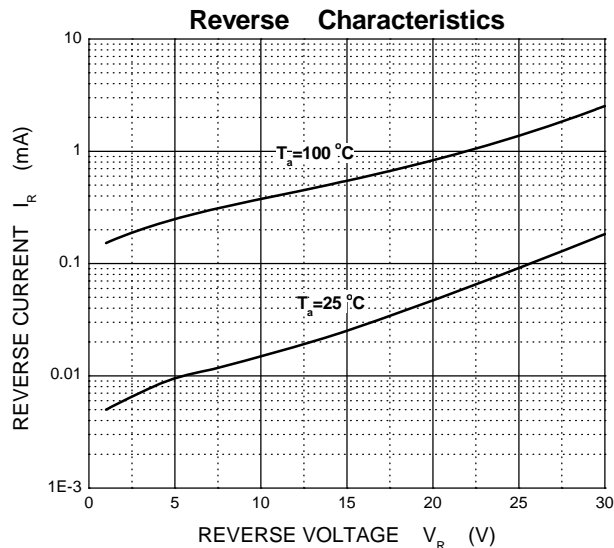
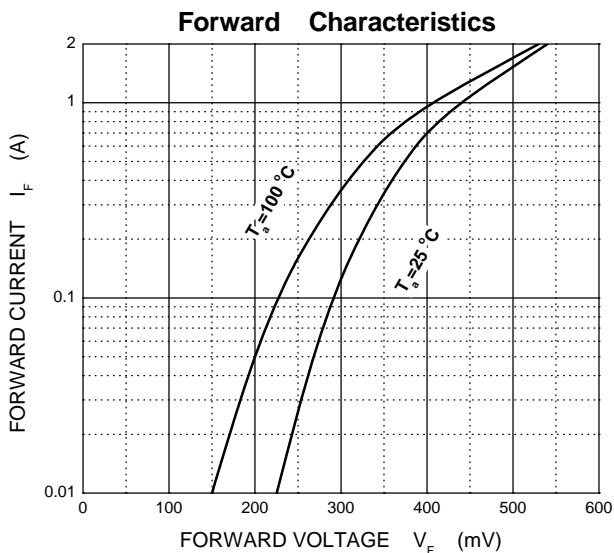
Symbol	Parameter	Value	Unit
$V_{RRM}$	Peak Repetitive Reverse Voltage	20	V
$V_{RWM}$	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	14	V
$I_F$	Continuous Forward Current	2	A
$I_{FSM}$	Non-repetitive Peak Forward Surge Current @ t=8.3ms	9	A
$P_D$	Power Dissipation	Note1	mW
		Note2	
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	Note1	°C/W
		Note2	
$T_j$	Junction Temperature	125	°C
$T_{stg}$	Storage Temperature	-55~+150	°C

#### Electrical Characteristics ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

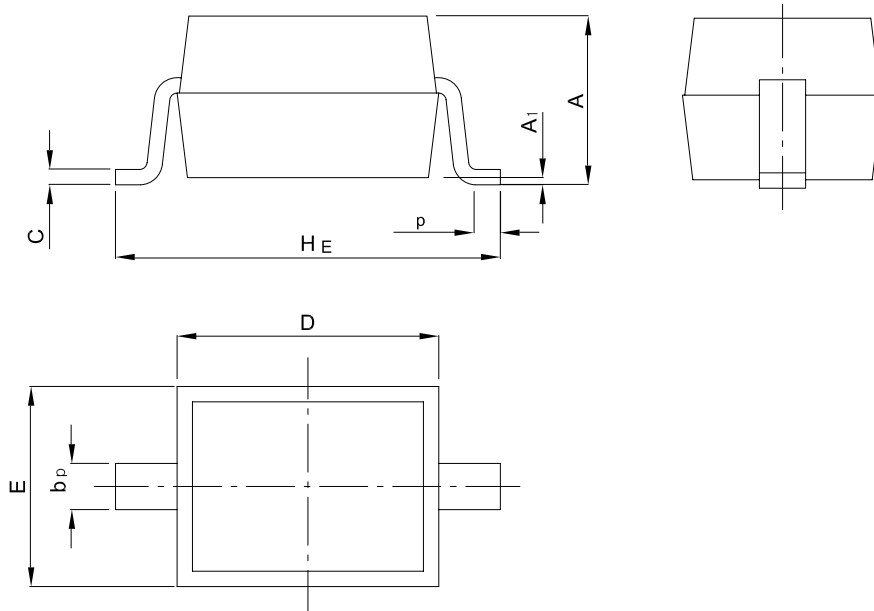
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1\text{mA}$	20			V
Reverse current	$I_R$	$V_R=10\text{V}$			80	$\mu\text{A}$
		$V_R=20\text{V}$			100	
Forward voltage	$V_F^*$	$I_F=1\text{A}$			0.45	V
		$I_F=2\text{A}$			0.55	
Total capacitance	$C_{tot}$	$V_R=4\text{V}, f=1\text{MHz}$			120	pF

\*Pulse test:  $t_p \leq 300 \mu\text{s}$ ;  $\delta \leq 0.02$ .

# Typical Characteristics

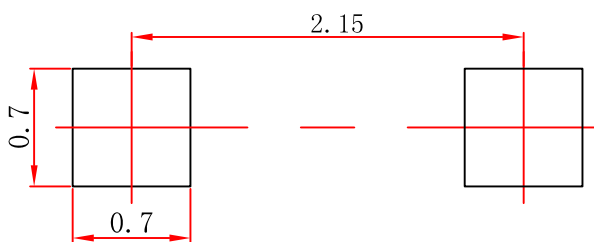


## SOD323 Package Outline Dimensions



UNIT	A	bp	C	D	E	HE	A1	Lp
mm	1.20	0.40	0.15	1.80	1.35	2.80	0.10	0.50
	0.90	0.25	0.10	1.60	1.15	2.30	0.01	0.20

## SOD323 Suggested Pad Layout



**Note:**

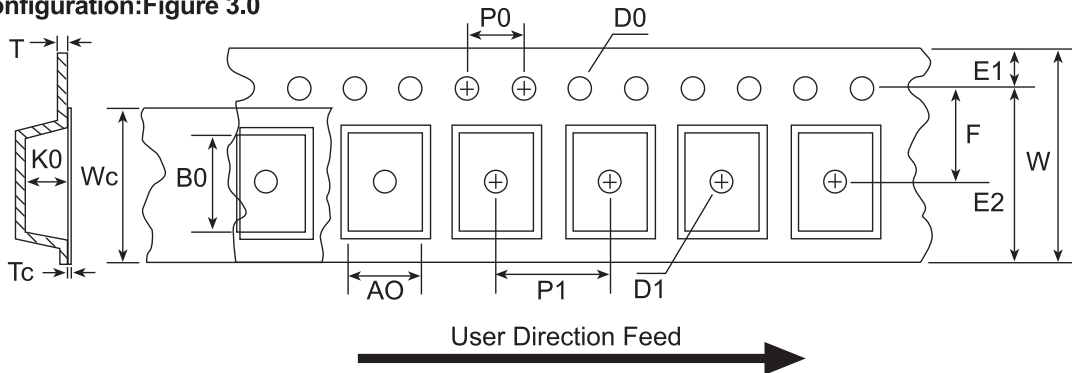
1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05$  mm.
3. The pad layout is for reference purposes only.

**NOTICE**

JSHD reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSHD does not assume any liability arising out of the application or use of any product described herein.

# Reel Taping Specifications For Surface Mount Devices-SOD323

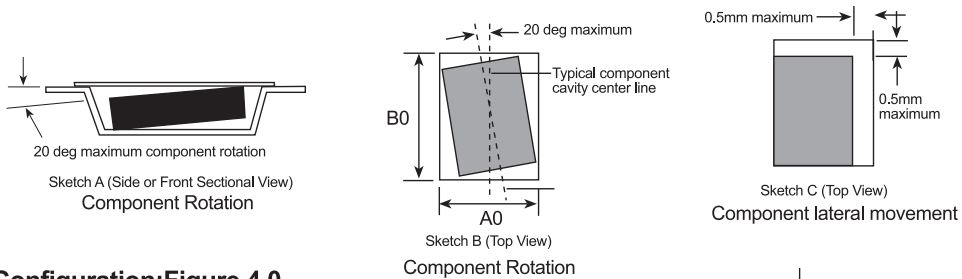
## SOD323 Embossed Carrier Tape Configuration: Figure 3.0



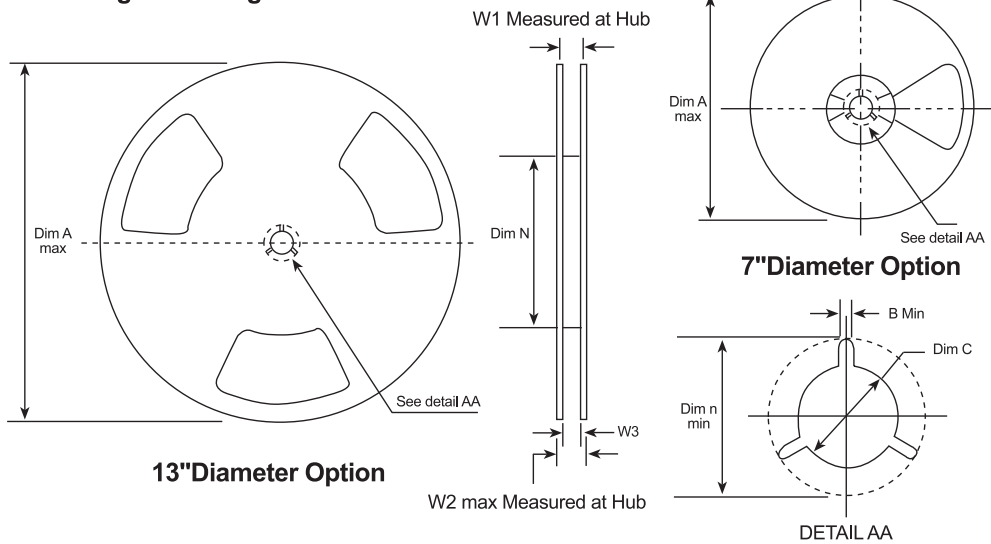
Dimensions are millimeter

Pkg type	A0	B0	W	D0	D1	E1	E2	F	P1	P0	K0	T	Wc	Tc
SOD323 (8mm)	1.46 +/-0.10	2.9 +/-0.10	8.0 +/-0.3	1.50 +/-0.125	1.125 +/-0.125	1.75 +/-0.10	6.25 min	3.50 +/-0.05	4.0 +/-0.10	4.0 +/-0.10	1.25 +/-0.10	0.25 +/-0.020	5.2 +/-0.20	0.06 +/-0.02

Notes: A0, B0 and K0 dimensions are determined with respect to the EW Jeced RS-481 rotational and lateral movement requirements (see sketches A, B and C).



## SOD323 Reel Configuration: Figure 4.0



Dimensions are in inches and millimeter

Type Size	Reel Option	Dim A	Dim B	Dim C	Dim D	Dim N	Dim W1	Dim W2	Dim W3 (LSL-USL)
8mm	7" Dia	7.00 177.8	0.059 1.5	512+0.020/-0.008 13+0.5/-0.2	0.795 20.0	2.165 55	0.331+0.059/-0.000 8.4+1.5/0	0.567 14.4	0.311-0.429 7.9-10.9
8mm	13" Dia	13.00 330	0.059 1.5	512+0.020/-0.008 13+0.5/-0.2	0.795 20.0	4.00 100	0.331+0.059/-0.000 8.4+1.5/0	0.567 14.4	0.311-0.429 7.9-10.9