

## SOD323 Plastic-Encapsulate Diodes

### Schottky Rectifier

#### Features

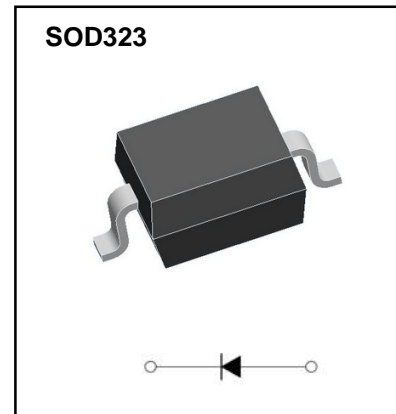
- $V_R$  30V
- $I_{FAV}$  1A

#### Applications

- High frequency inverters
- Free wheeling
- Polarity protection applications

#### Marking

- SK



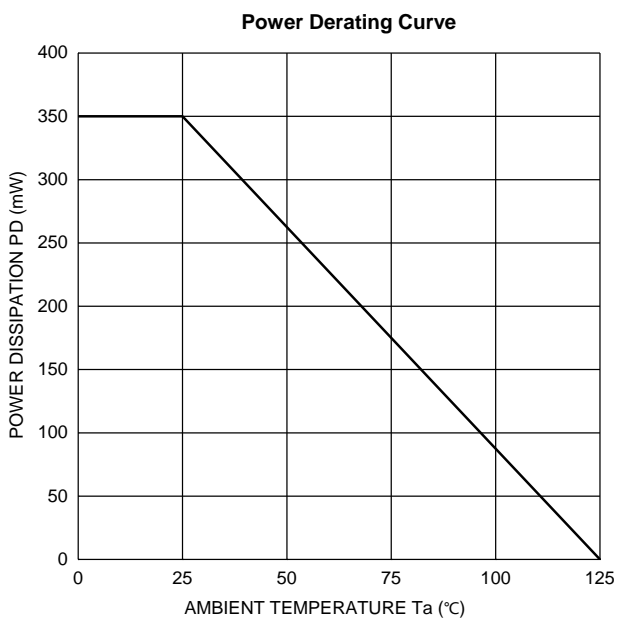
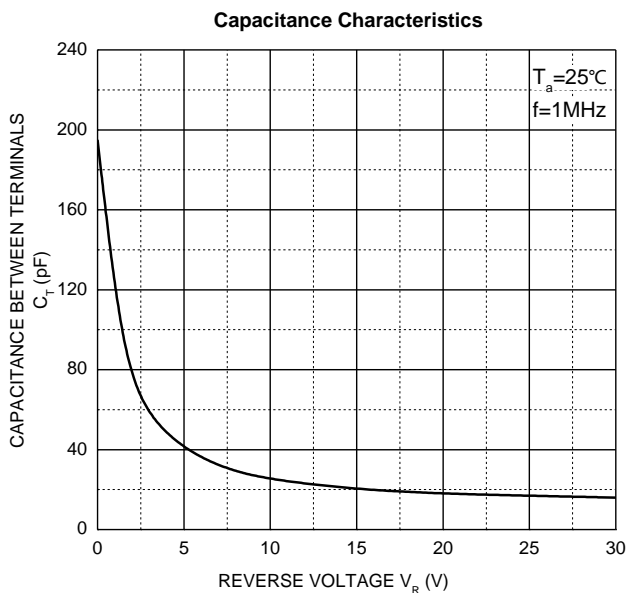
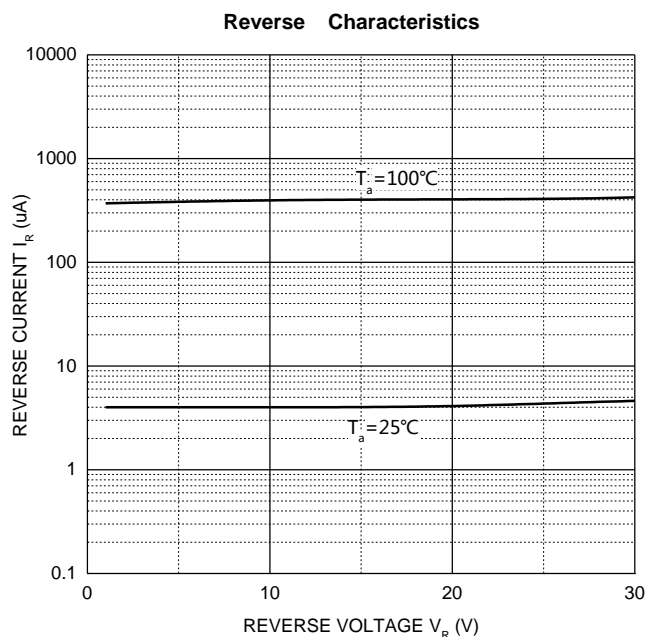
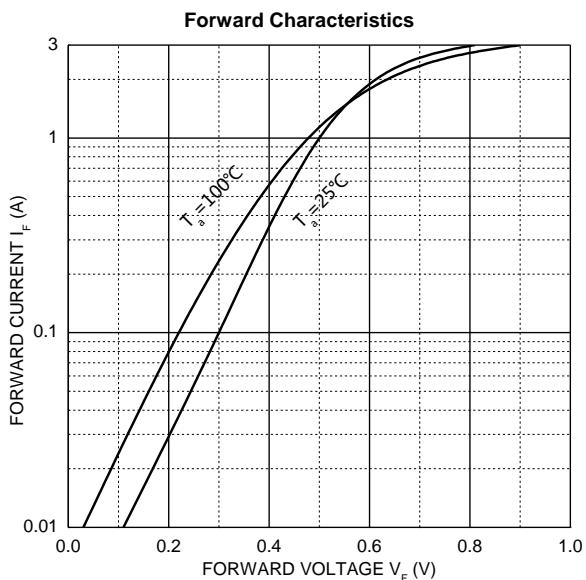
#### Limiting Values (Absolute Maximum Rating)

Parameter	Symbol	Value	Unit
DC reverse voltage	$V_R$	30	V
Mean rectifying current	$I_O$	1	A
Non-repetitive Peak Forward Surge Current @ $t=8.3ms$	$I_{FSM}$	15	A
Power Dissipation	$P_D$	0.25	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	400	$^{\circ}C/W$
Junction Temperature	$T_J$	125	$^{\circ}C$
Storage Temperature	$T_{STG}$	-55 ~ +150	$^{\circ}C$

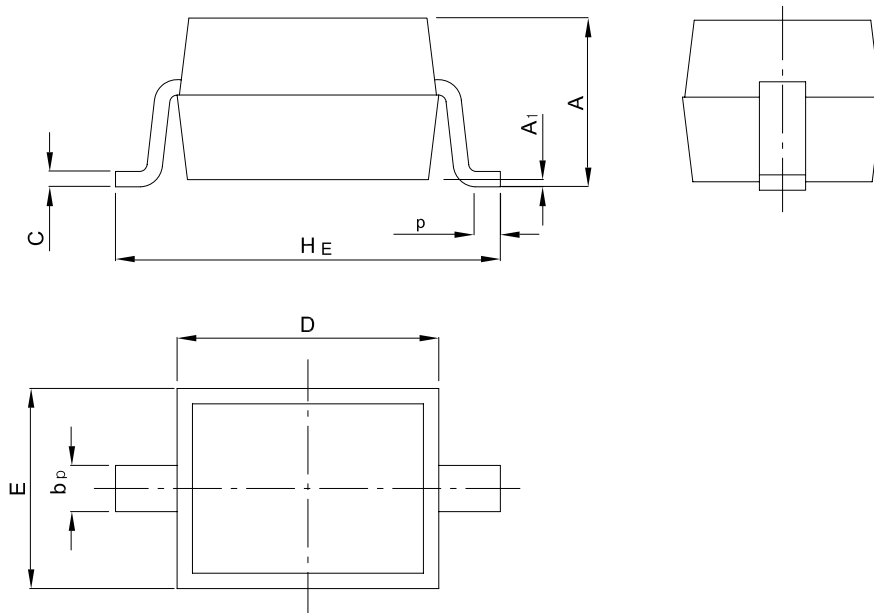
#### Electrical Characteristics ( $T_a=25^{\circ}C$ Unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse voltage	$V_{BR}$	$I_R = 250\mu A$	30	40		V
Forward voltage	$V_F$	$I_F = 0.5A$	0	0.40	0.48	V
		$I_F = 1.0A$	0	0.48	0.53	V
		$I_F = 3.0A$	0	0.73	0.85	V
Reverse current	$I_R$	$V_R = 30V$		3	50	$\mu A$
Diode capacitance	$C_D$	$V_R = 4V, f = 1MHz$		50		pF

# Typical Characteristics

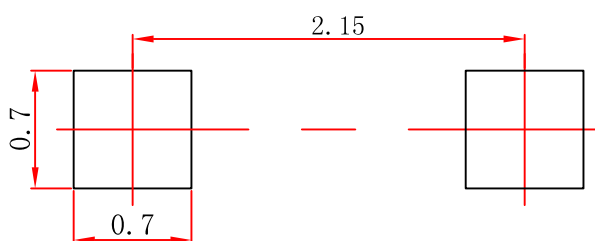


## SOD323 Package Outline Dimensions



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:

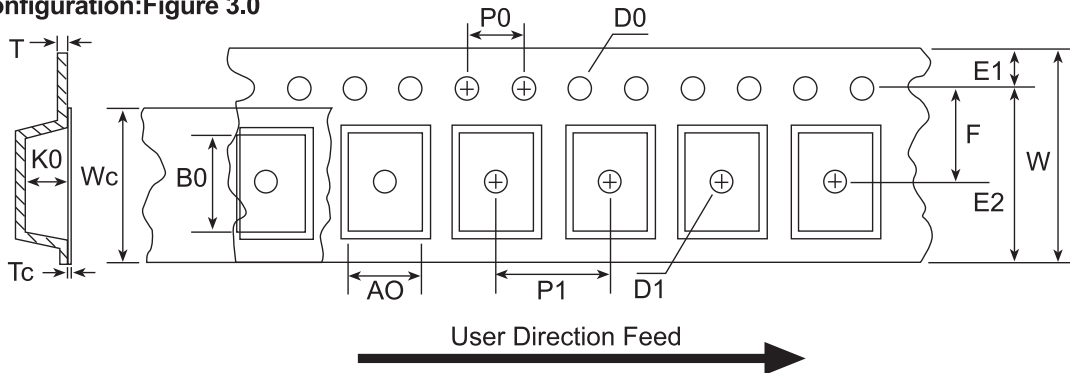
1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05$  mm.
3. The pad layout is for reference purposes only.

### 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

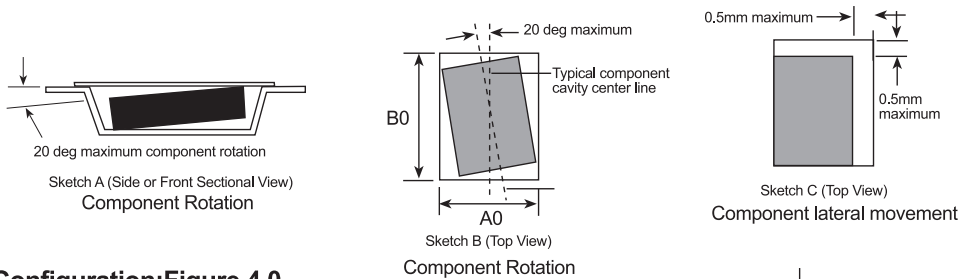
## SOD323 Embossed Carrier Tape Configuration: Figure 3.0



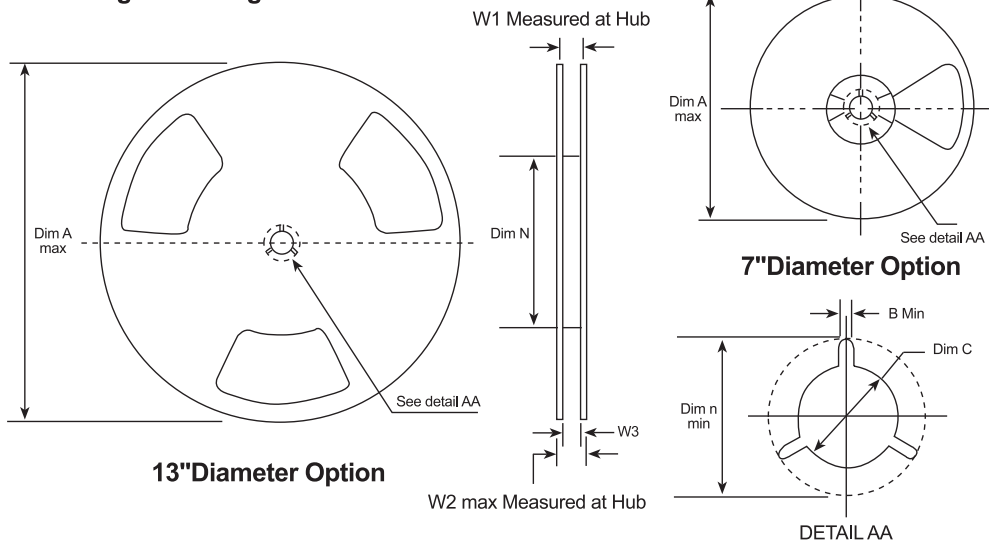
Dimensions are millimeter

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 Jecdec 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