HIGH DIODE

B2020WS

SOD323 Plastic-Encapsulate Diodes

Schottky Rectifier

Features

- Low Forward Voltage Drop
- Very Small SMD Package

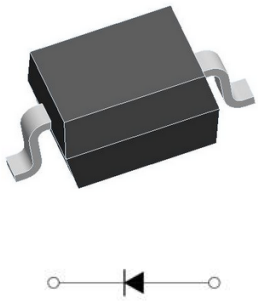
Applications

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

Marking

- SH

SOD323



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	250	mW
		Note2	480	
$R_{\Theta JA}$	Thermal Resistance from Junction to Ambient	Note1	400	℃/W
		Note2	208	
T_j	Junction Temperature		125	℃
T_{stg}	Storage Temperature		-55~+150	℃

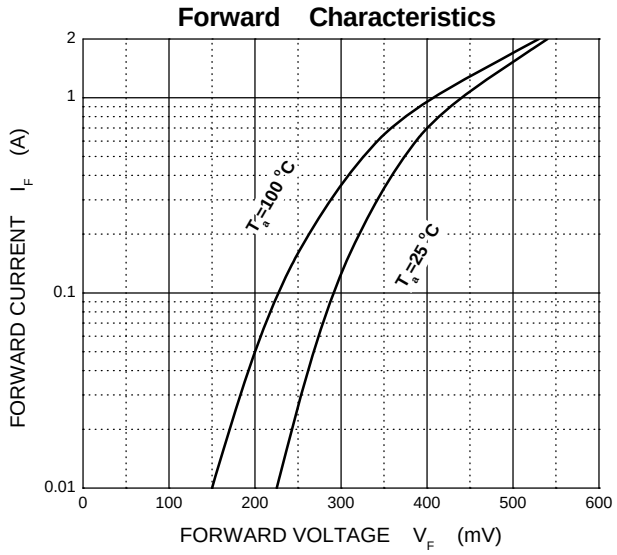
Electrical Characteristics (T_a=25℃ Unless otherwise specified)

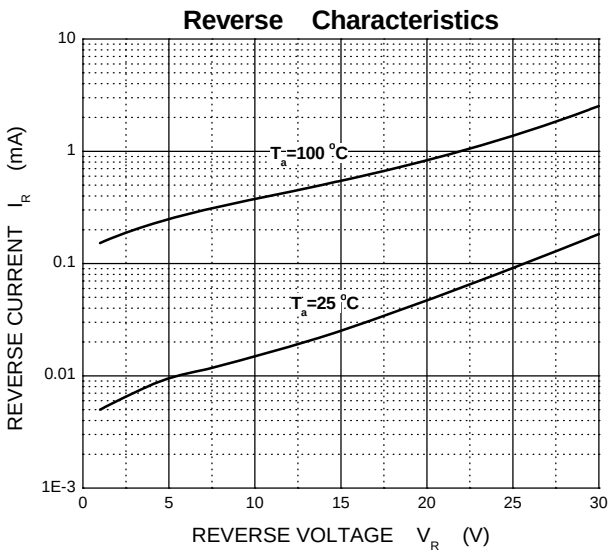
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R=1mA	20			V
Reverse current	I_R	V_R=10V			80	μA
		V_R=20V			100	
Forward voltage	V_F*	I_F=1A			0.45	V
		I_F=2A			0.55	
Total capacitance	C_{tot}	V_R=4V,f=1MHz			120	pF

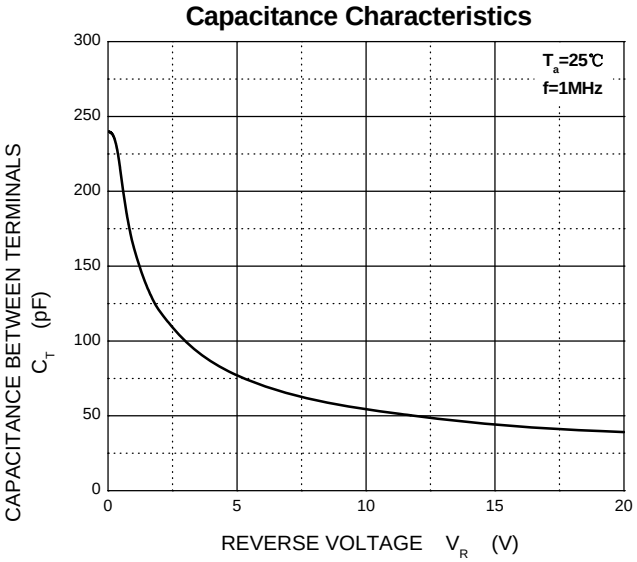
*Pulse test: tp ≤ 300 μs; δ ≤ 0.02.

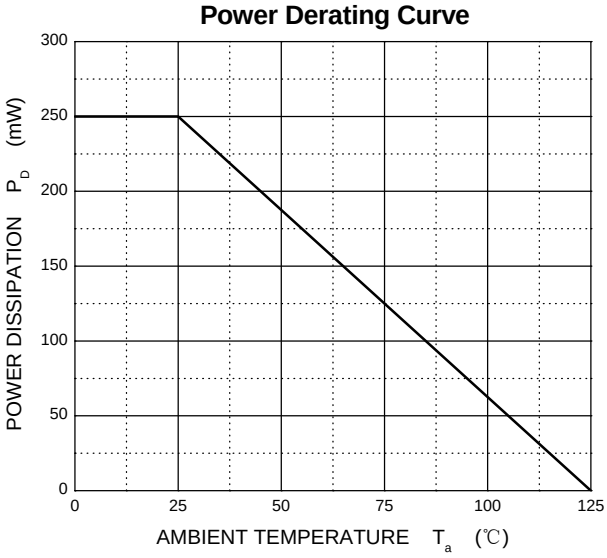
Downloaded from alldatasheet.com

Typical Characteristics



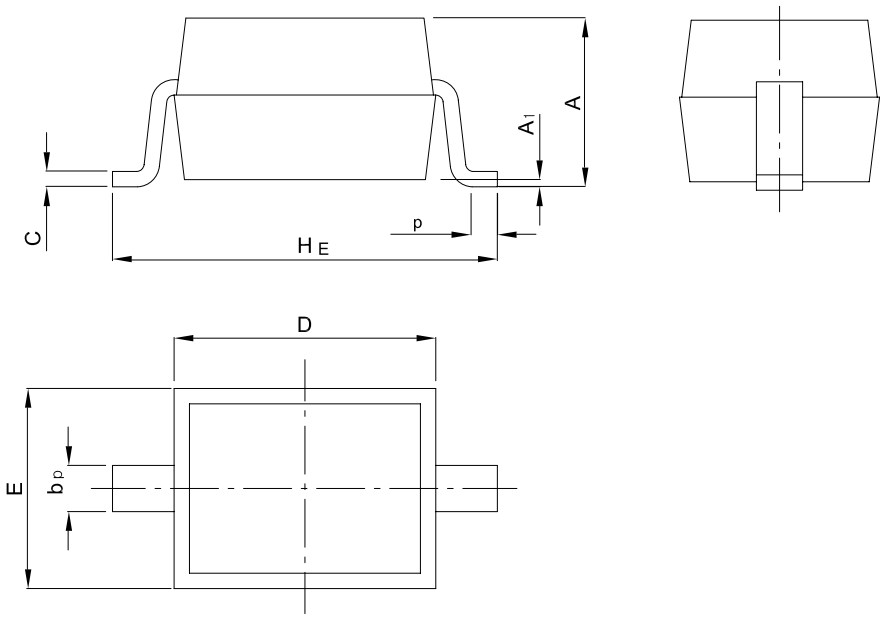






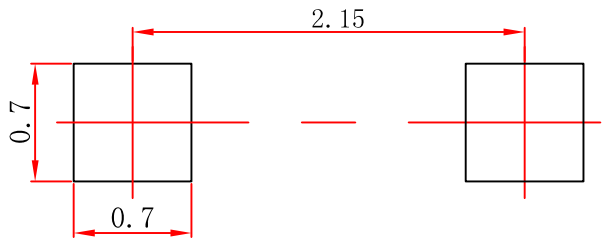
Downloaded from alldatasheet.com

SOD323 Package Outline Dimensions



UNIT	A	b_p	C	D	E	H_E	A_1	L_p
mm	1.20 0.90	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30	0.10 0.01	0.50 0.20

SOD323 Suggested Pad Layout



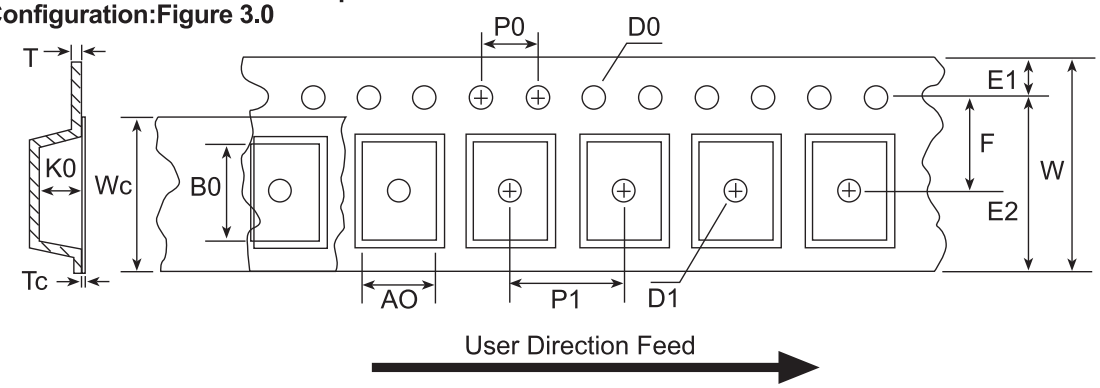
Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

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.

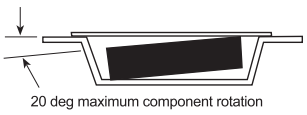
Downloaded from alldatasheet.com

SOD323 Embossed Carrier Tape Configuration:Figure 3.0

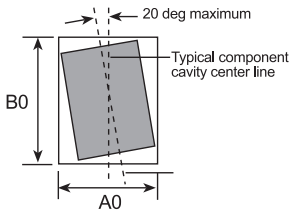


Dimensions are millimeter														
Pkg type	A0	B0	W	D0	D1	E1	E2	F	P1	P0	K0	T	Wc	Tc
SOD323 (8mm)	1.46 +/-0.10	2.9 +/-0.10	8.0 +/-0.3	1.50 +/-0.125	1.125 +/-0.125	1.75 +/-0.10	6.25 min	3.50 +/-0.05	4.0 +/-0.10	4.0 +/-0.10	1.25 +/-0.10	0.25 +/-0.020	5.2 +/-0.20	0.06 +/-0.02

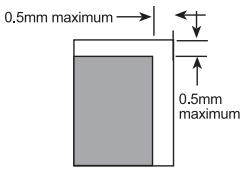
Notes:A0,B0 and K0 dimensions are detemined with respect to the EW Jedec RS-481 rotational and lateral movement requirements (see sketches A,B and C).



Sketch A (Side or Front Sectional View)
Component Rotation

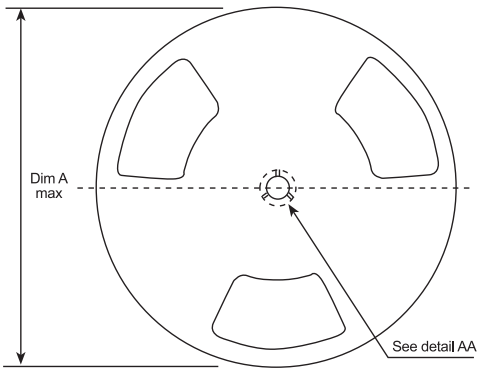


Sketch B (Top View)
Component Rotation

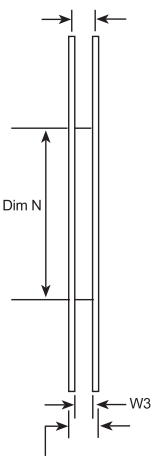


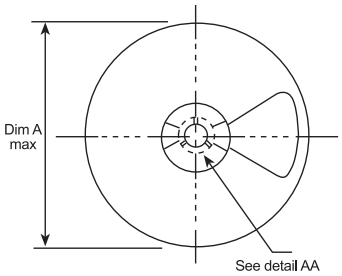
Sketch C (Top View)
Component lateral movement

SOD323 Reel Configuration:Figure 4.0

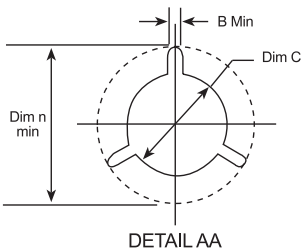


13"Diameter Option





7"Diameter Option



DETAIL AA

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

Downloaded from alldatasheet.com