SOD323 Plastic-Encapsulate Diodes

Schottky Rectifier

Features

- V_R 30V
- I_{FAV} 1A

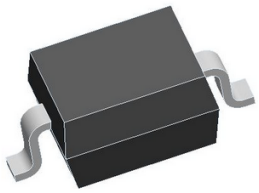
Applications

- High frequency inverters
- Free wheeling
- Polarity protection applications

Marking

- SK

SOD323





Limiting Values (Absolute Maximum Rating)

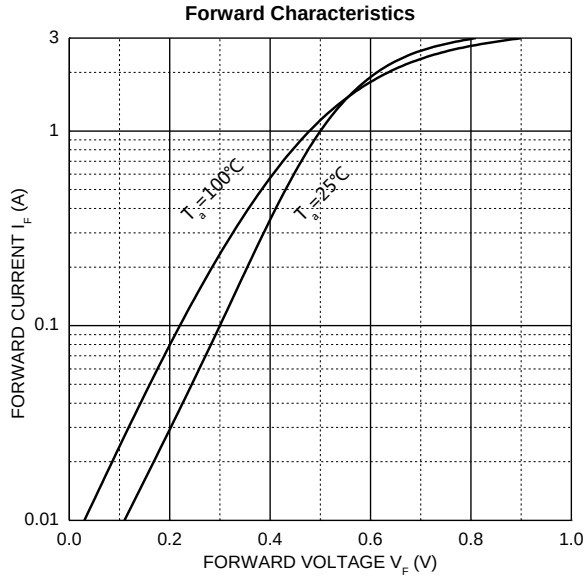
Parameter	Symbol	Value	Unit
DC reverse voltage	V_R	30	V
Mean rectifying current	I_O	1	A
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I_{FSM}	15	A
Power Dissipation	P_D	0.25	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	400	℃/W
Junction Temperature	T_J	125	℃
Storage Temperature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

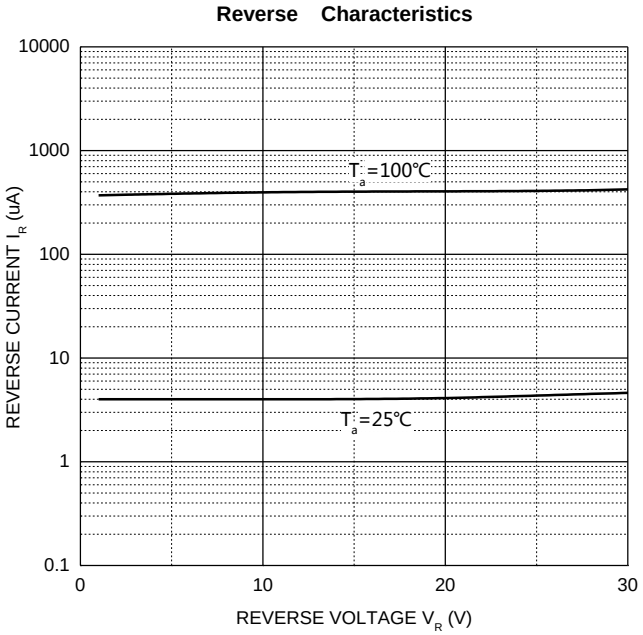
Electrical Characteristics (T_a=25℃ Unless otherwise specified）

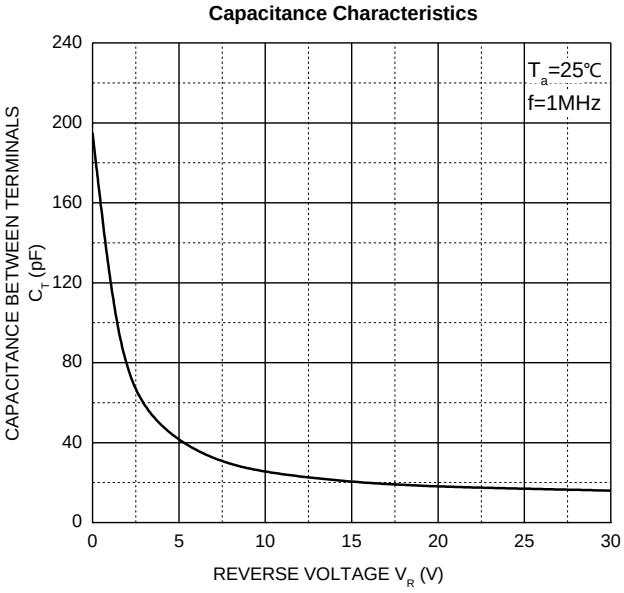
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse voltage	V_{BR}	I_R =250μA	30	40		V
Forward voltage	V_F	I_F =0.5A	0	0.40	0.48	V
		I_F =1.0A	0	0.48	0.53	V
		I_F =3.0A	0	0.73	0.85	V
Reverse current	I_R	V_R =30V		3	50	μA
Diode capacitance	C_D	VR=4V, f=1MHz		50		pF

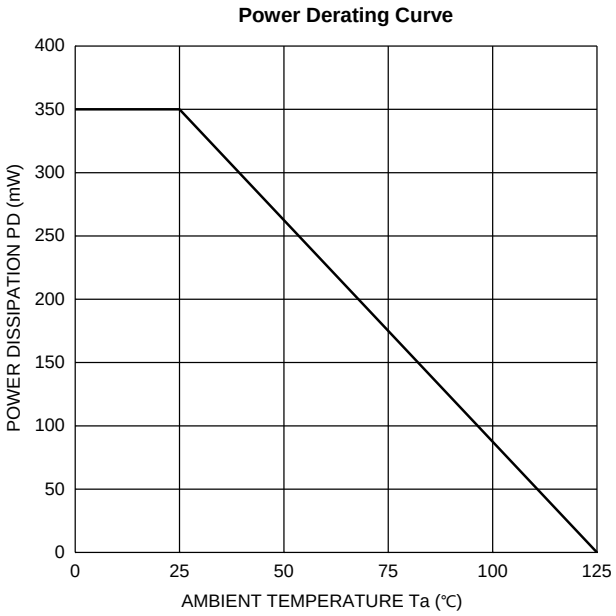
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Typical Characteristics



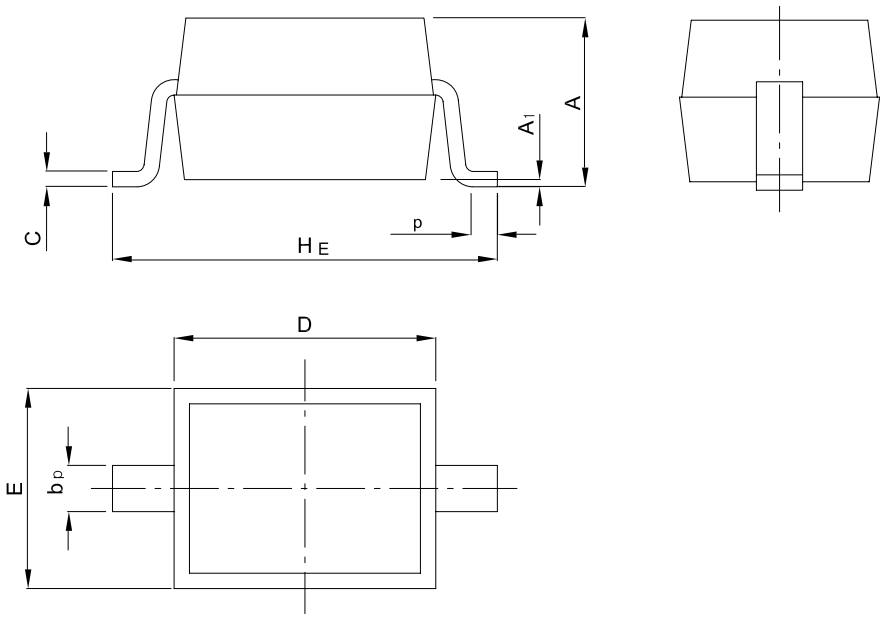






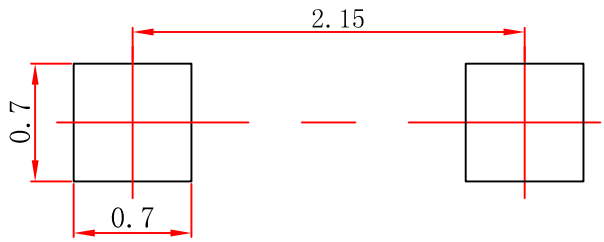
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SOD323 Package Outline Dimensions



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



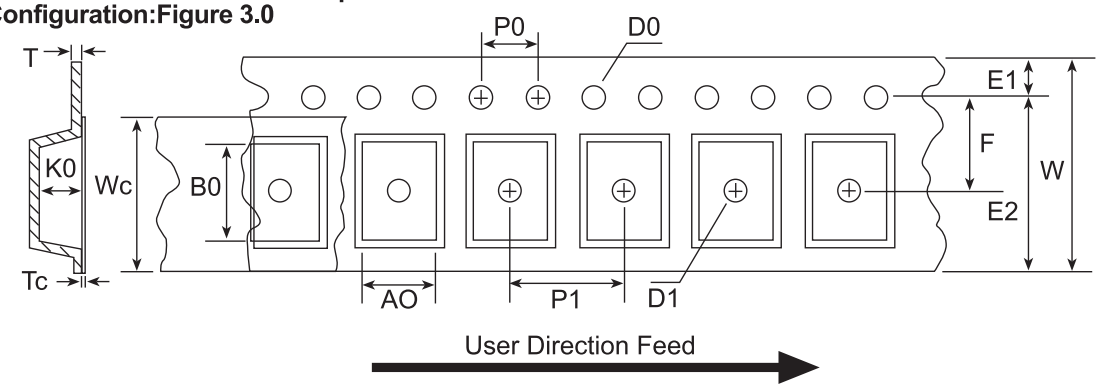
Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

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.

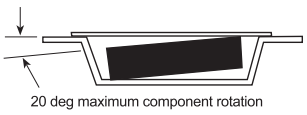
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SOD323 Embossed Carrier Tape Configuration:Figure 3.0

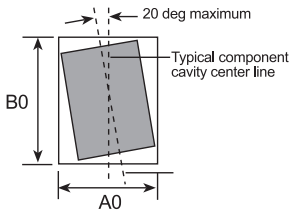


Dimensions are millimeter														
Pkg type	A0	B0	W	D0	D1	E1	E2	F	P1	P0	K0	T	Wc	Tc
SOD323 (8mm)	1.46 +/-0.10	2.9 +/-0.10	8.0 +/-0.3	1.50 +/-0.125	1.125 +/-0.125	1.75 +/-0.10	6.25 min	3.50 +/-0.05	4.0 +/-0.10	4.0 +/-0.10	1.25 +/-0.10	0.25 +/-0.020	5.2 +/-0.20	0.06 +/-0.02

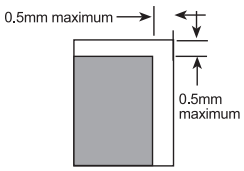
Notes:A0,B0 and K0 dimensions are detemined with respect to the EW Jedec RS-481 rotational and lateral movement requirements (see sketches A,B and C).



Sketch A (Side or Front Sectional View)
Component Rotation

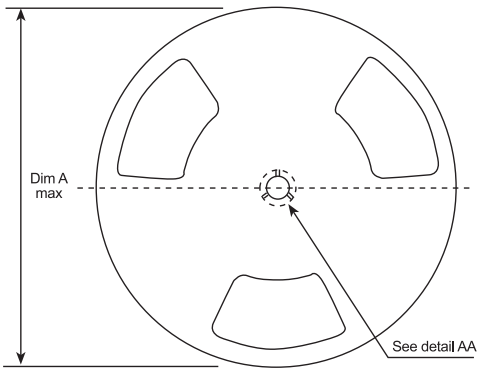


Sketch B (Top View)
Component Rotation

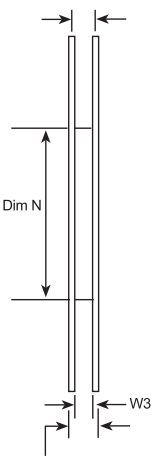


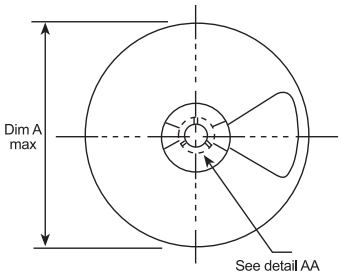
Sketch C (Top View)
Component lateral movement

SOD323 Reel Configuration:Figure 4.0

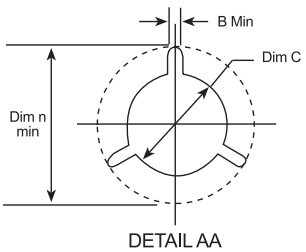


13"Diameter Option





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

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