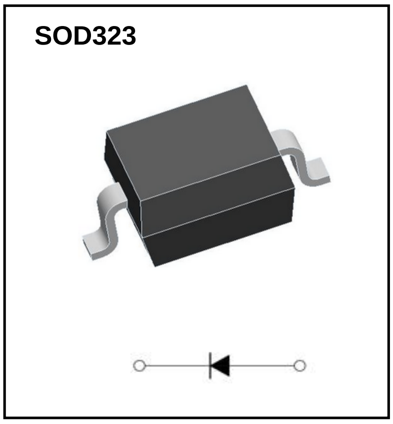
SOD323 Plastic-Encapsulate Diodes

Schottky Rectifier

Features

- I_o 0.35A
- VRRM 20V-40V
- High surge current capability
- Low Forward Voltage



Marking

SD103AWS:S4 **SD103BWS:S5** **SD103CWS:S6**

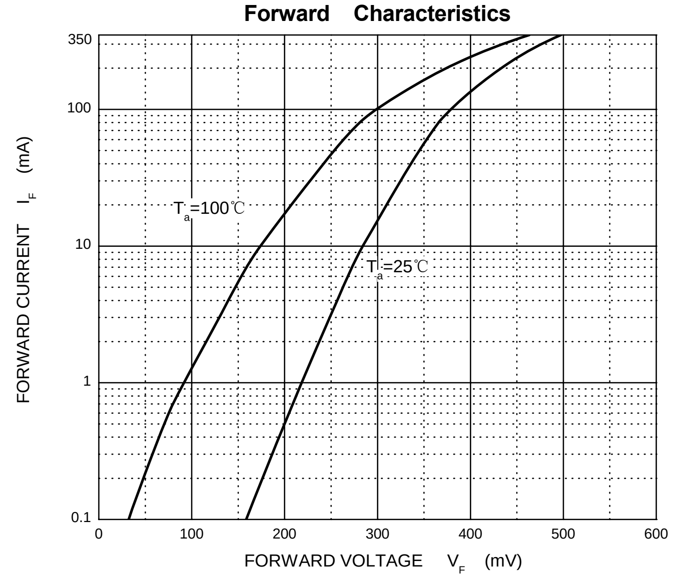
Limiting Values (Absolute Maximum Rating)

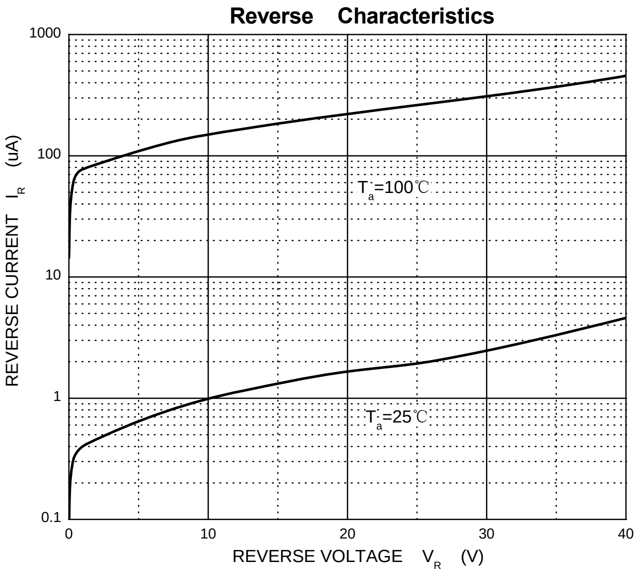
Parameter	Symbol	SD103AWS	SD103BWS	SD103CWS	Unit
Peak Repetitive Peak Reverse Voltage **Working Peak Reverse Voltage** **DC Blocking Voltage**	V_{RRM} V_{RWM} V_R	40	30	20	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	21	14	V
Forward Continuous Current	I_{FM}	350			mA
Non-repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0			A
Power Dissipation	Pd	200			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500			℃/W
Junction Temperature	T_j	125			℃
Storage Temperature	T_{STG}	-55~+150			℃

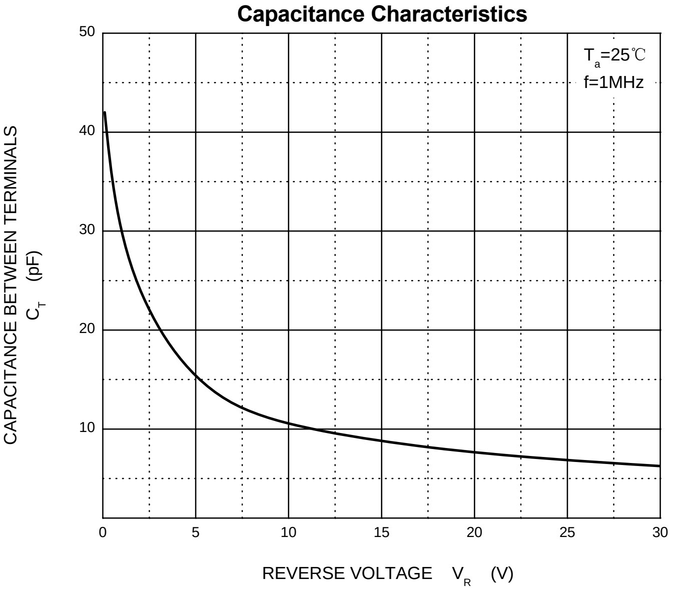
Electrical Characteristics (T_a=25℃ Unless otherwise specified)

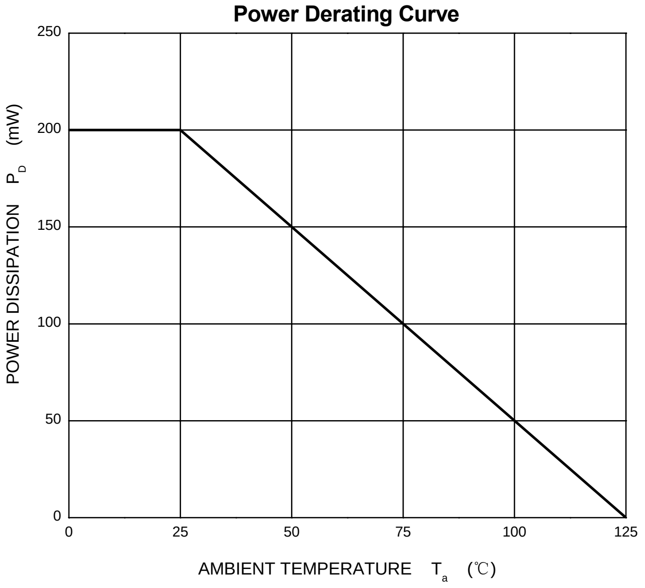
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage SD103AWS SD103BWS SD103CWS	$V_{(BR)}$	 40 30 20			V	 I_R=100μA I_R=100μA I_R=100μA
Forward voltage	V_F			0.37 0.60	V	I_F=20mA I_F=200mA
Reverse current SD103AWS SD103BWS SD103CWS	I_{RM}			5.0	μA	 V_R=30V V_R=20V V_R=10V
Capacitance between terminals	C_T			50	pF	V_R=0V,f=1.0MHz
Reverse recovery time	t_{rr}		10		ns	I_F=I_R=200mA Irr=0.1XI_R,R_L=100Ω

Typical Characteristics

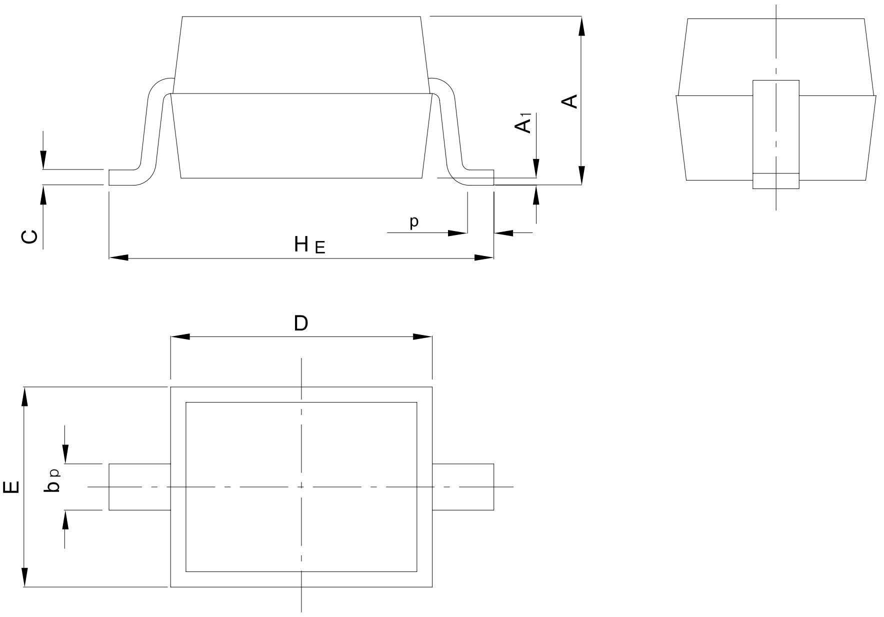






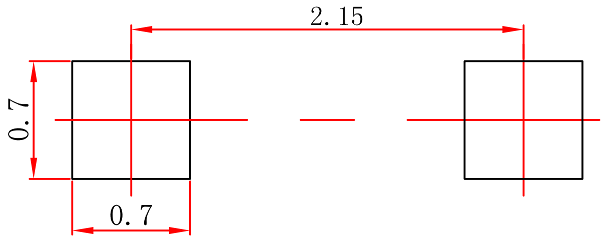


SOD323 Package Outline Dimensions



UNIT	A	bp	C	D	E	HE	A1	Lp
mm	1.20 0.80	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

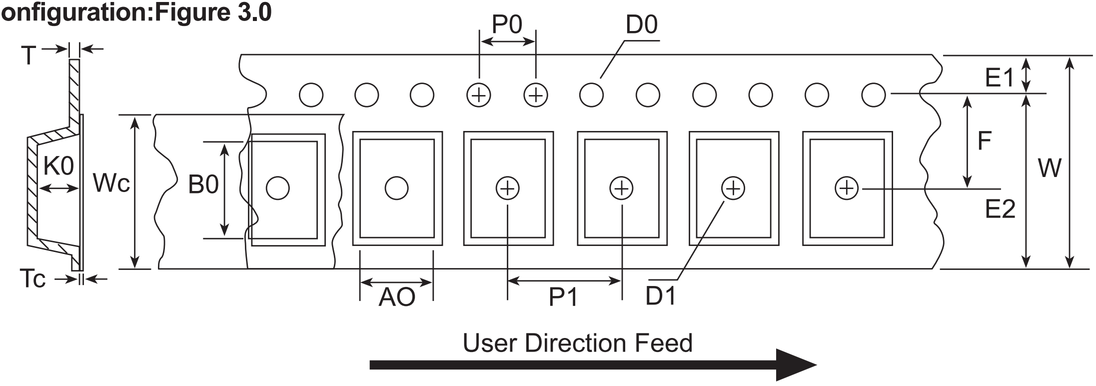
SOD323 Suggested Pad Layout



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

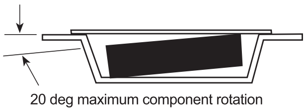
Reel Taping Specifications For Surface Mount Devices–SOD323

SOD323 Embossed Carrier Tape Configuration:Figure 3.0

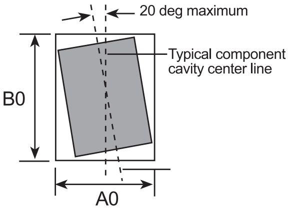


Dimensions are millimeter													
Pkg type	A0	B0	W	D0	D1	E1	E2	F	P1	P0	K0	T	Wc	Tc
SOD323 (8mm)	1.46 +/-0.10	2.9 +/-0.10	8.0 +/-0.3	1.50 +/-0.125	1.125 +/-0.125	1.75 +/-0.10	6.25 min	3.50 +/-0.05	4.0 +/-0.10	4.0 +/-0.10	1.25 +/-0.10	0.25 +/-0.020	5.2 +/-0.20	0.06 +/-0.02

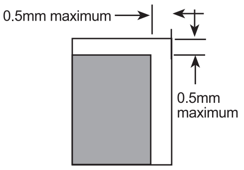
Notes:A0,B0 and K0 dimensions are detemined with respect to the EW Jedec RS-481 rotational and lateral movement requirements (see sketches A,B and C).



Sketch A (Side or Front Sectional View)
Component Rotation

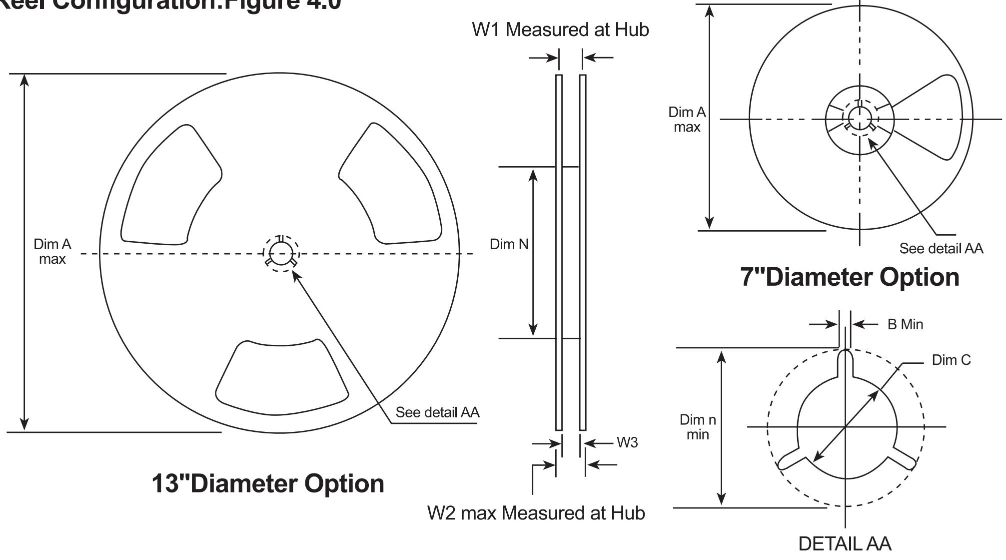


Sketch B (Top View)
Component Rotation



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