

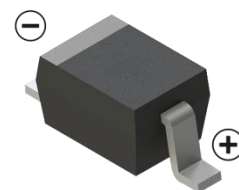
High Voltage Switching Diodes

■ Features

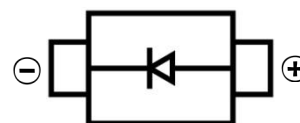
- Fast switching
- Designed for surface mount application
- Plastic material-UL recognition flammability classification 94V-O

■ Applications

Surface mount fast switching diode



SOD-323



■ Absolute Maximum Ratings Ta = 25°C

Characteristic	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	250	V
Repetitive Peak Reverse Voltage	V_{RRM}	250	V
Forward Continuous Current	I_F	200	mA
Peak forward surge current	I_{FSM}	625	mA
Power Dissipation	P_d	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	635	°C/W
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	°C

■ Electrical Characteristics Ta = 25°C

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	250	-	V	$I_R=100\mu A$
Forward Voltage	V_F	-	1000 1250	mV	$I_F=100mA$ $I_F=200mA$
Reverse Current	I_R	-	0.1 100	μA	$V_R=200V$ $V_R=200V, T_J=150^\circ C$
Diode Capacitance	C_D	-	5	pF	$V_R=0, f=1.0MHz$
Reverse Recovery Time	t_{rr}	-	50	ns	$I_F=I_R=30mA, R_L=100\Omega$

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■ Typical Characteristics

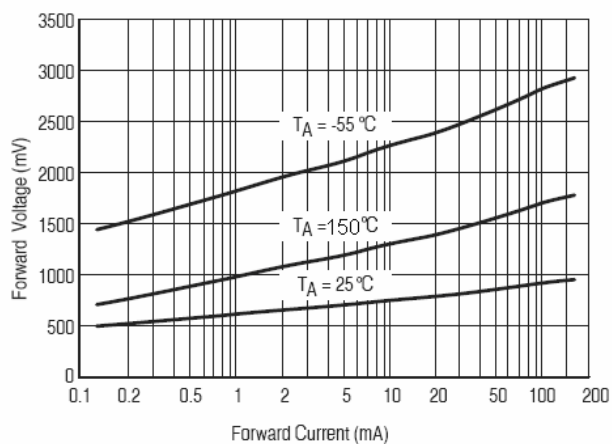


Figure 1. Forward Voltage

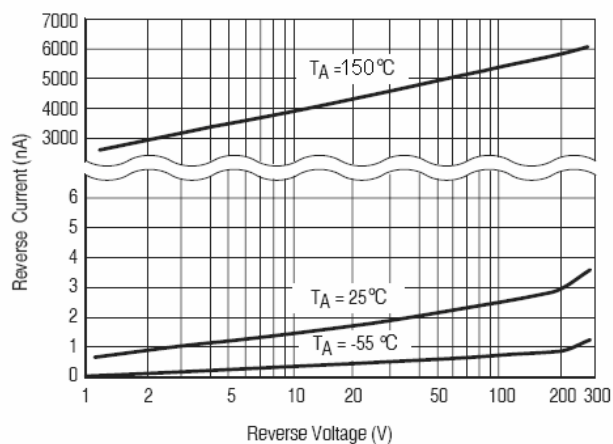
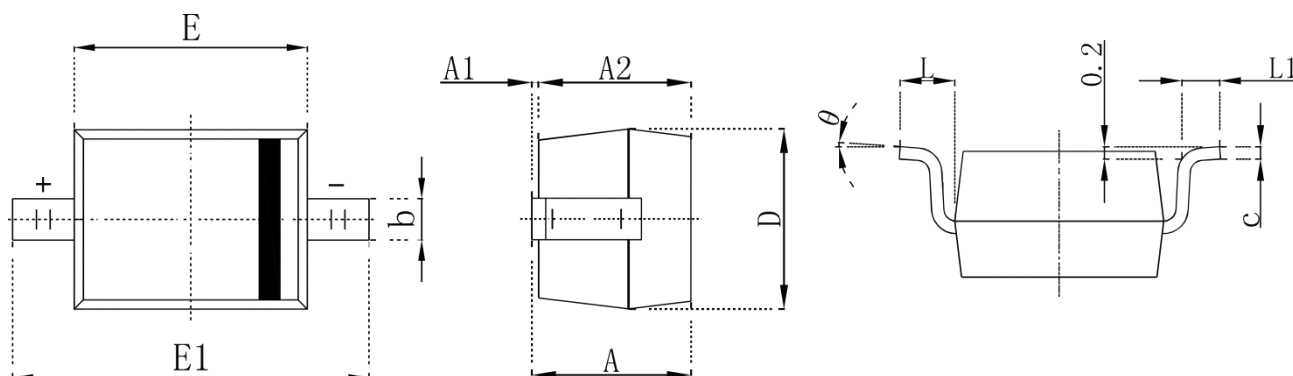


Figure 2. Reverse Leakage

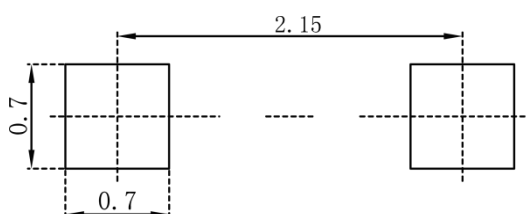
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SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.250	2.750	0.100	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

SOD-323 Suggested Pad Layout



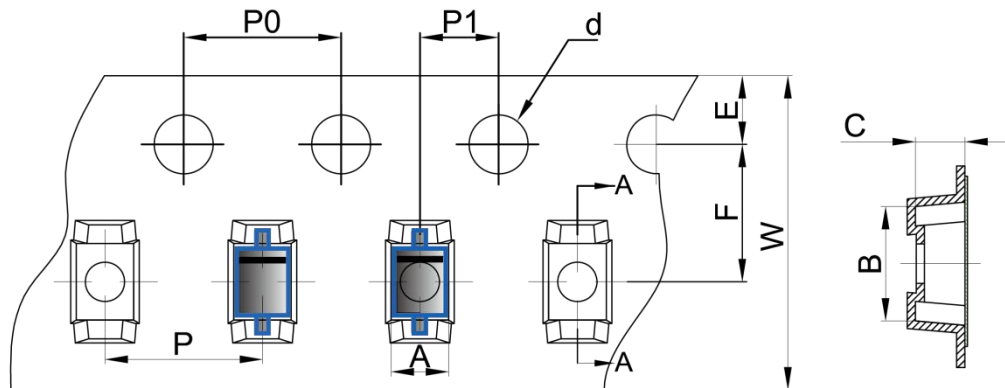
Note:

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

High Voltage Switching Diodes

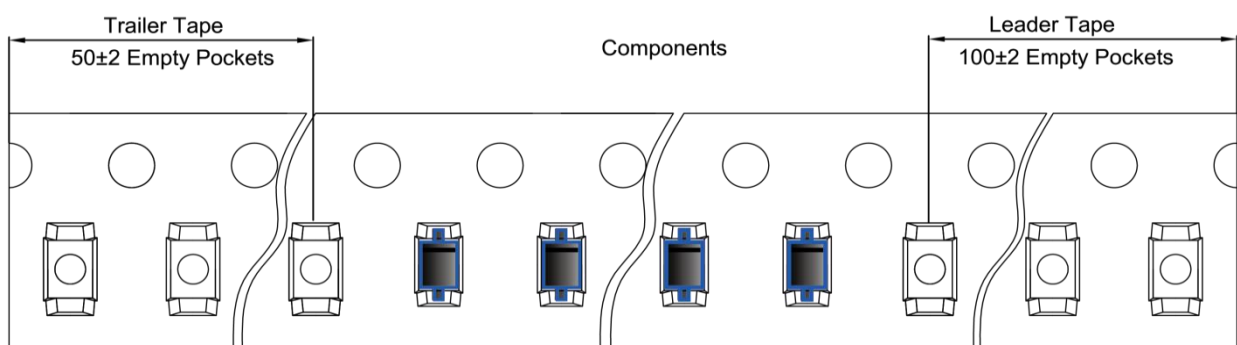
SOD-323 Tape and Reel

SOD-323 Embossed Carrier Tape

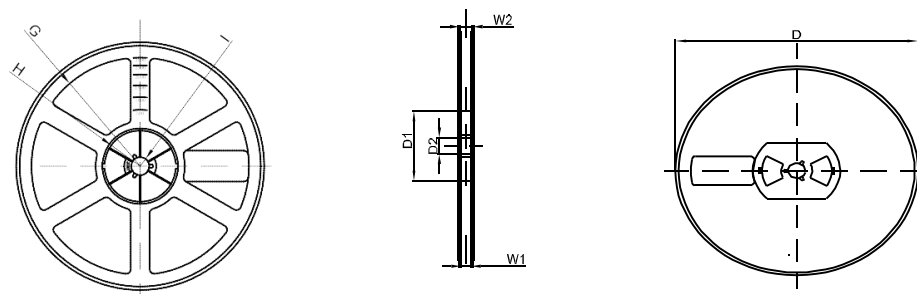


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.48	3.3	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

SOD-323 Tape Leader and Trailer



SOD-323 Reel



DIMENSIONS ARE IN MILLIMETER								
REEL OPTION	D	D1	D2	G	H	I	W1	W2
7" DIA	Ø178	54.40	13.00	R78	R25.60	R6.50	9.50	12.30
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1