



## SOD-323 Plastic-Encapsulate Diodes

### 1SS355 Switching Diode

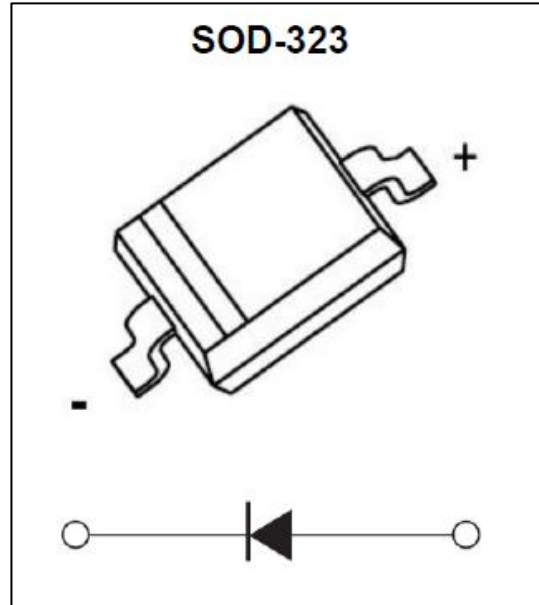
#### Features

- Small Speed switching
- High Speed switching
- High Reliability
- AEC Q101 Qualified

#### Application

- High Speed switching

#### Marking



#### ABSOLUTE MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ unless otherwise noted)

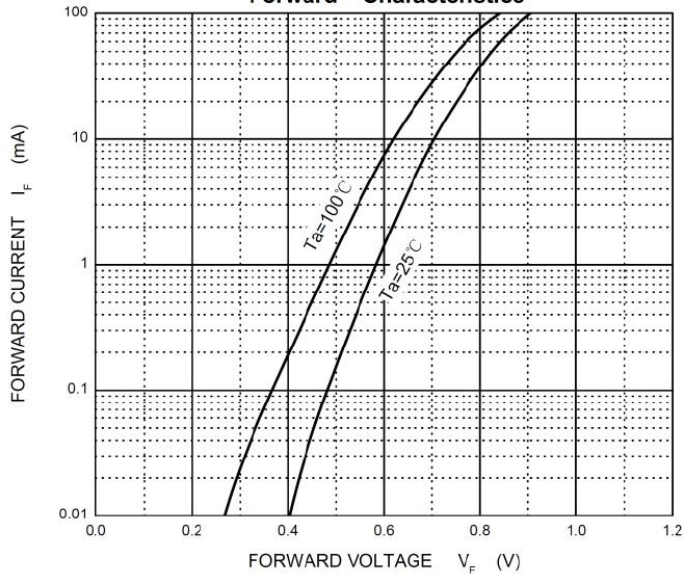
Parameter	Symbol	Value	Unit
Non-repetitive peak reverse voltage	$V_{RM}$	90	V
DC blocking voltage	$V_R$	80	V
Mean rectifying current	$I_O$	0.1	A
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	$I_{FSM}$	225	mA
Power Dissipation	$P_D$	0.2	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 ~ +150	$^\circ\text{C}$

#### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless otherwise noted)

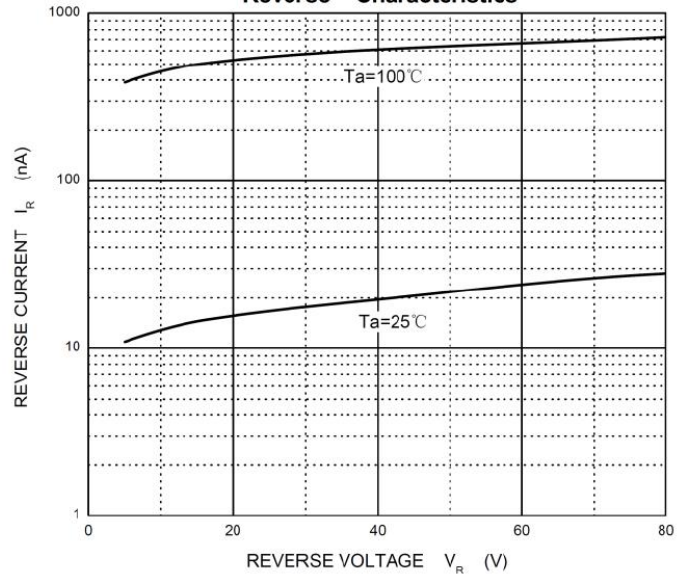
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Forward voltage	$V_F$	$I_F=100\text{mA}$			1.2	V
Reverse current	$I_R$	$V_R=80\text{V}$			0.1	$\mu\text{A}$
Capacitance between terminals	$C_T$	$V_R=0.5\text{V}, f=1\text{MHz}$			3	pF
Reverse recovery time	$t_{rr}$	$I_F=10\text{mA}, V_R=6\text{V}, R_L=100\Omega$			4	ns

# Typical Characteristics

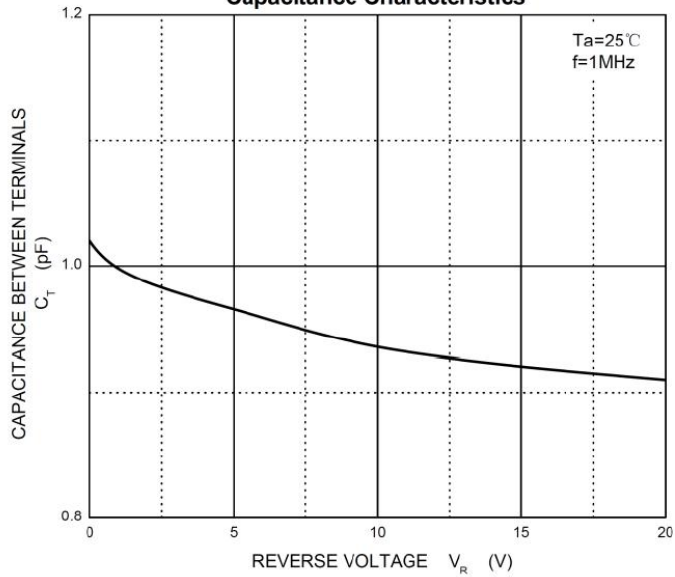
**Forward Characteristics**



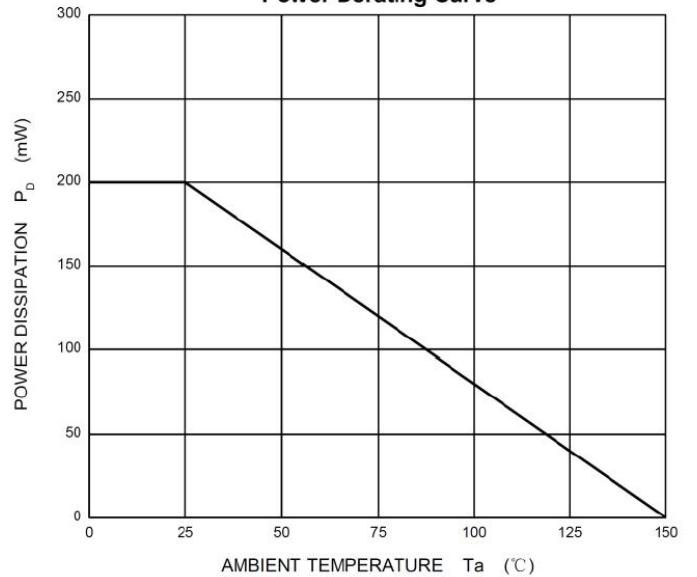
**Reverse Characteristics**



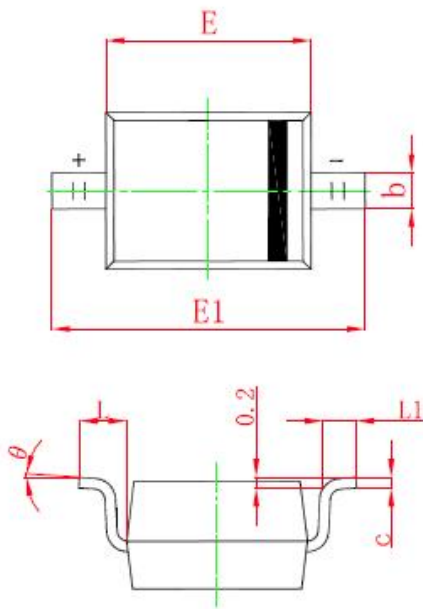
**Capacitance Characteristics**



**Power Derating Curve**

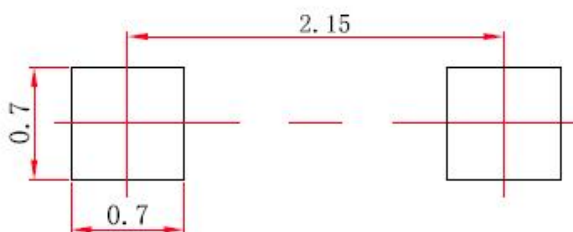


## SOD323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.100		0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
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	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

## SOD323 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.

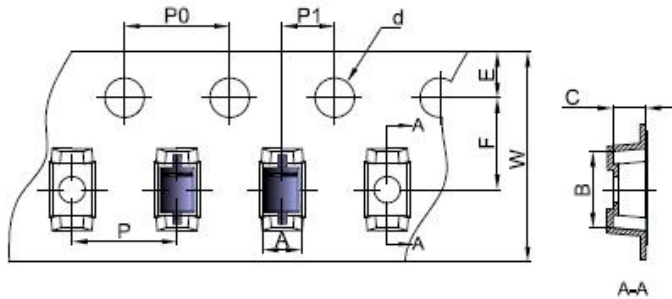
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# Reel Taping Specifications For Surface Mount Devices–SOD323

## SOD-323 Embossed Carrier Tape

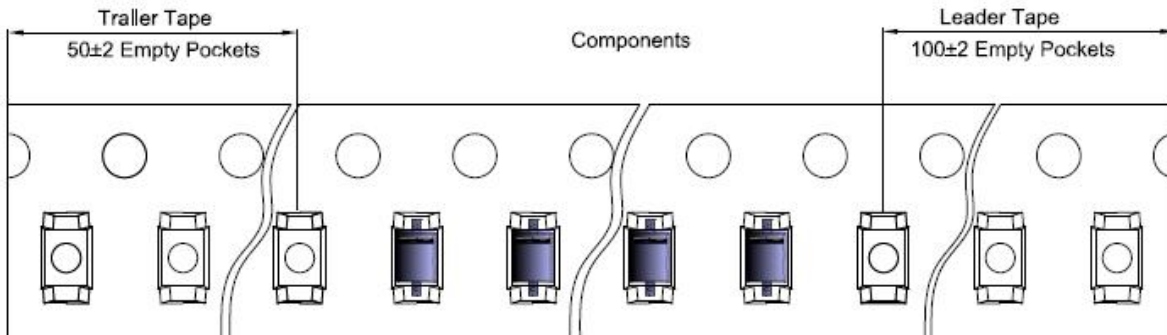


### Packaging Description:

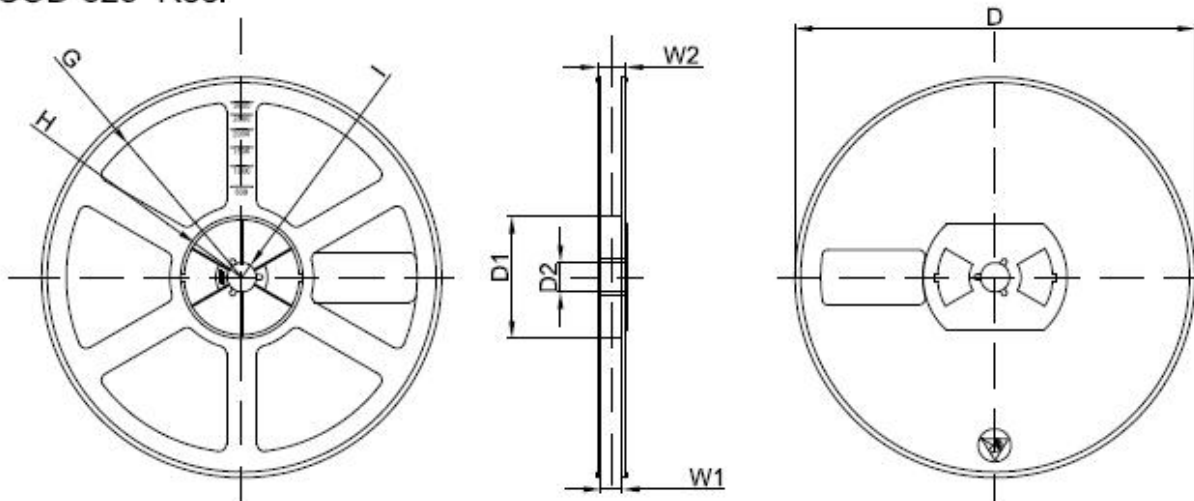
SOD-323 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive In nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg 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

## 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	Ø178,00	54,40	13,00	R78,00	R25,60	R6,50	9,50	12,30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 Inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	

Date of change	Rev #	revise content
2023/09/01	A/0	/