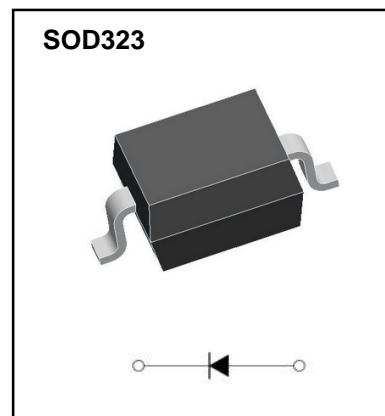


## SOD-323 Plastic-Encapsulate Diodes

### Schottky Rectifier

#### Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transi
- High Conductance
- Also Available in Lead Free Version



#### Limiting Values (Absolute Maximum Rating)

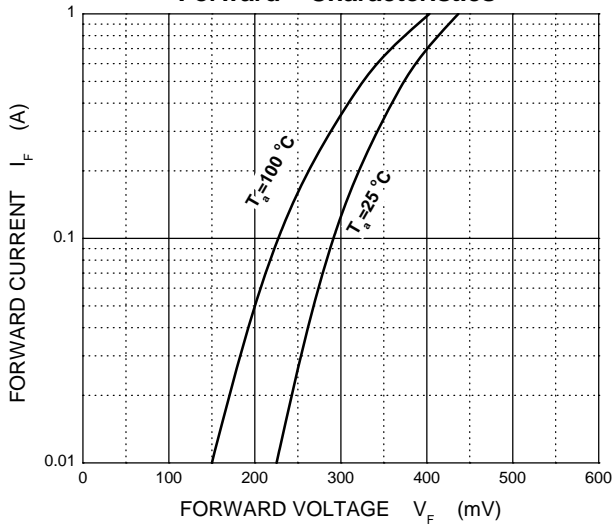
Parameter	Symbol	Value	Unit
Peak repetitive peak reverse voltage	$V_{RRM}$	20	V
Working peak reverse voltage	$V_{RWM}$		
DC blocking voltage	$V_R$		
RMS reverse voltage reverse voltage (DC)	$V_{R(RMS)}$	14	V
Average rectified output current	$I_o$	0.5	A
Non-repetitive Peak Forward Surge Current @t=8.3ms	$I_{FSM}$	5.5	A
Power dissipation	$P_D$	200	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	500	°C/W
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{STG}$	-55~+150	°C
Voltage rate of change	dv/dt	1000	V/μs

#### Electrical Characteristics ( $T_a=25^{\circ}\text{C}$ Unless otherwise specified)

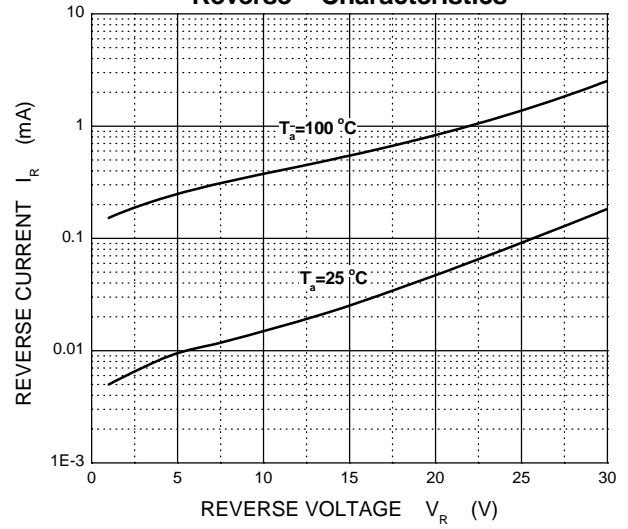
	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=250\mu\text{A}$	20			V
Reverse current	$I_R$	$V_R=10\text{V}$			75	μA
		$V_R=20\text{V}$			250	
Forward voltage	$V_F$	$I_F=0.1\text{A}$			0.33	V
		$I_F=0.5\text{A}$			0.39	
Capacitance between terminals	$C_T$	$V_R=1, f=1\text{MHz}$		170		pF

# Typical Characteristics

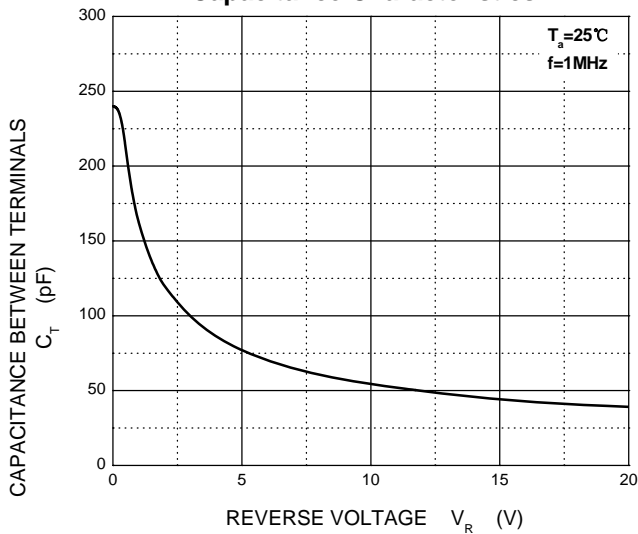
**Forward Characteristics**



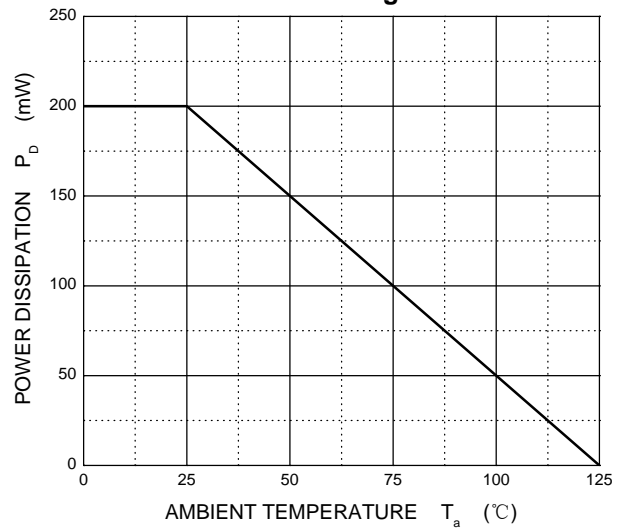
**Reverse Characteristics**



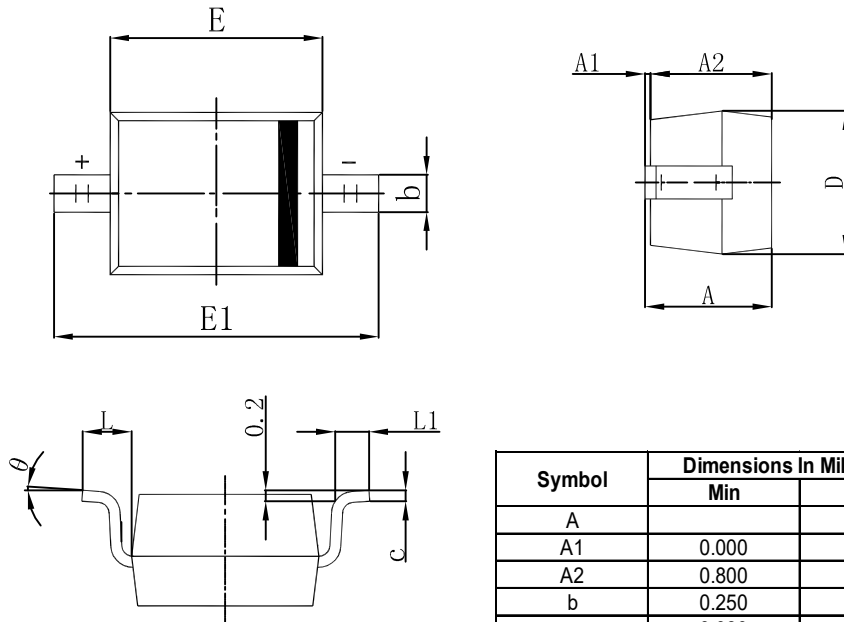
**Capacitance Characteristics**



**Power Derating Curve**

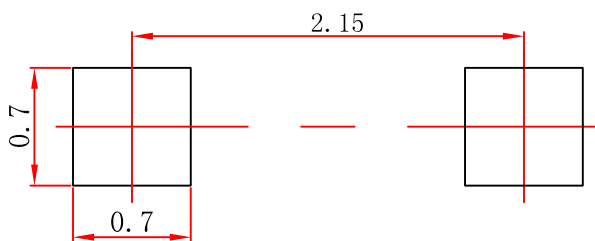


## SOD-323 Package Outline Dimensions



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°

## SOD-323 Suggested Pad Layout



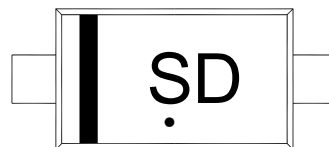
### Note:

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

## Ordering Information

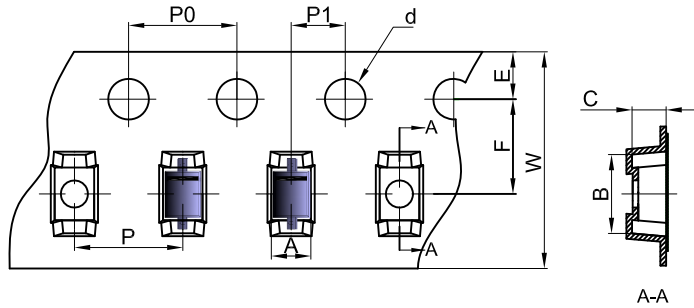
Part Number	Package	Shipping Quantity
B0520WS	SOD-323	3000/tape&Reel

## Marking Diagram



# Reel Taping Specifications For Surface Mount Devices-SOD-323

## SOD-323 Embossed Carrier Tape

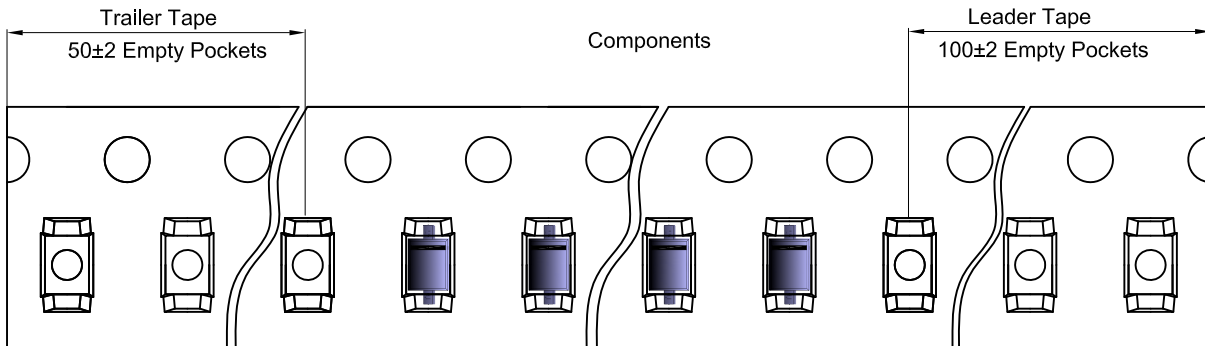


### Packaging Description:

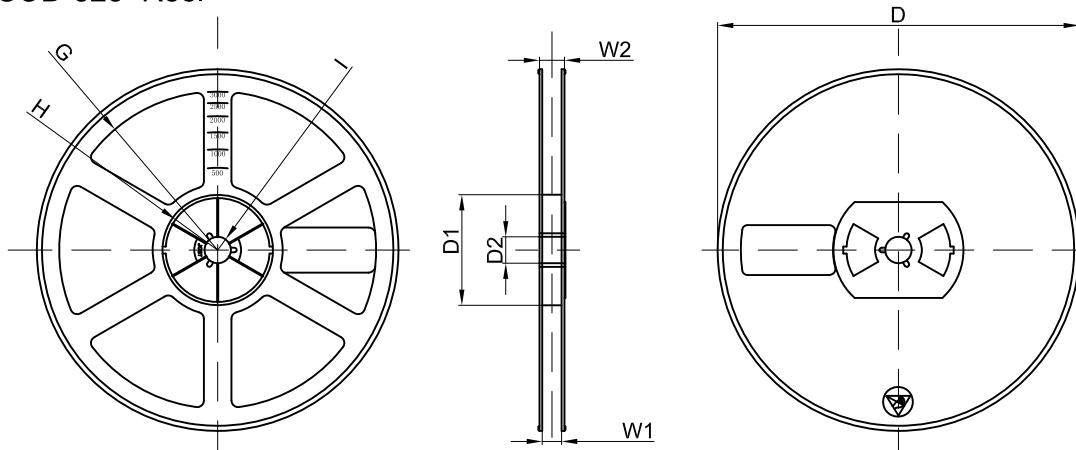
SOD-323 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts 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	