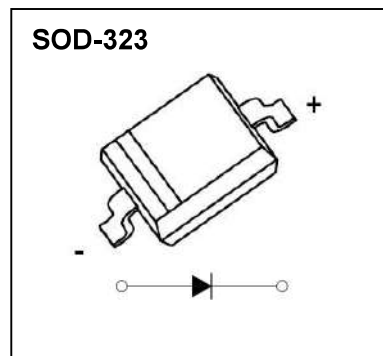


## SOD-323 Plastic-Encapsulate Diodes

SCHOTTKY BARRIER DIODE

### Features:

- High Current Rectifier Schottky Diode with Low  $V_F$  Drop
- Low Voltage, Low Inductance
- For Power Supply
- For Detection and Step-up-Conversion



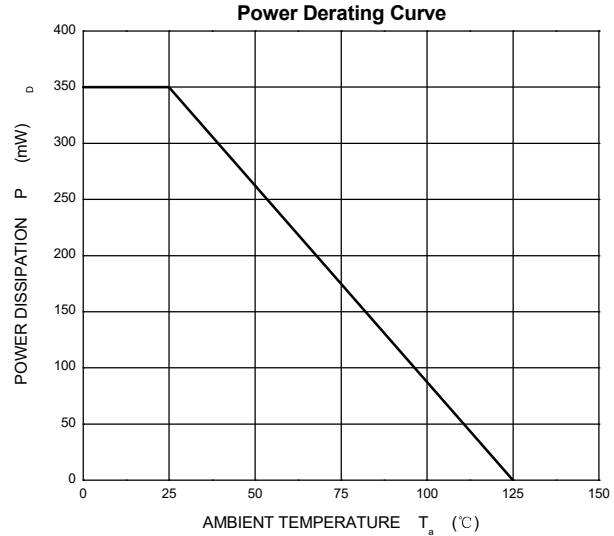
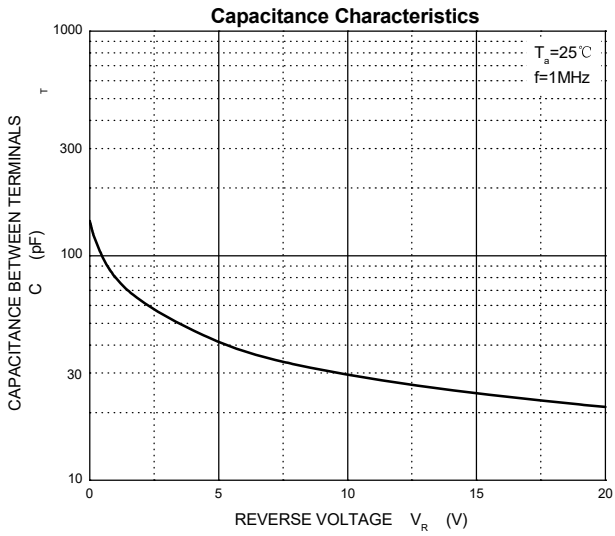
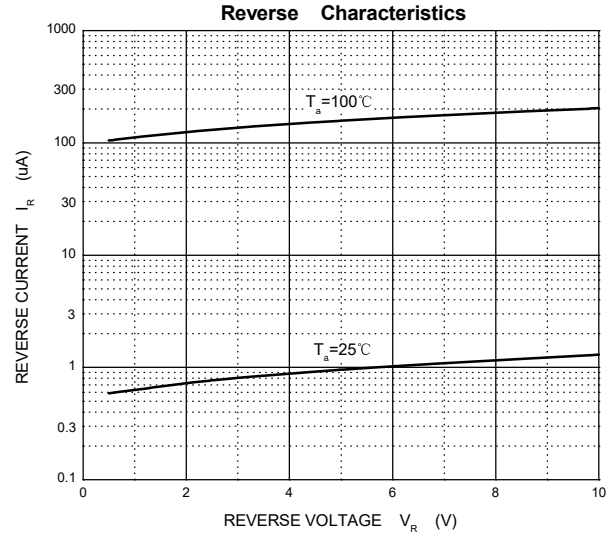
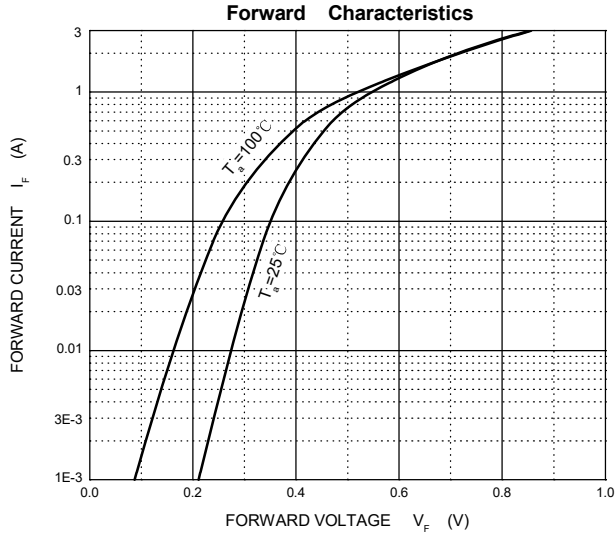
### MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted )

Symbol	Parameter	Value	Unit
$V_R$	DC Blocking Voltage	10	V
$I_F$	Forward Current	3	A
$I_{FSM}$	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	5	
$P_D$	Power Dissipation	350	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	286	$^{\circ}\text{C}/\text{W}$
$T_j$	Junction Temperature	125	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature	-55~+150	$^{\circ}\text{C}$

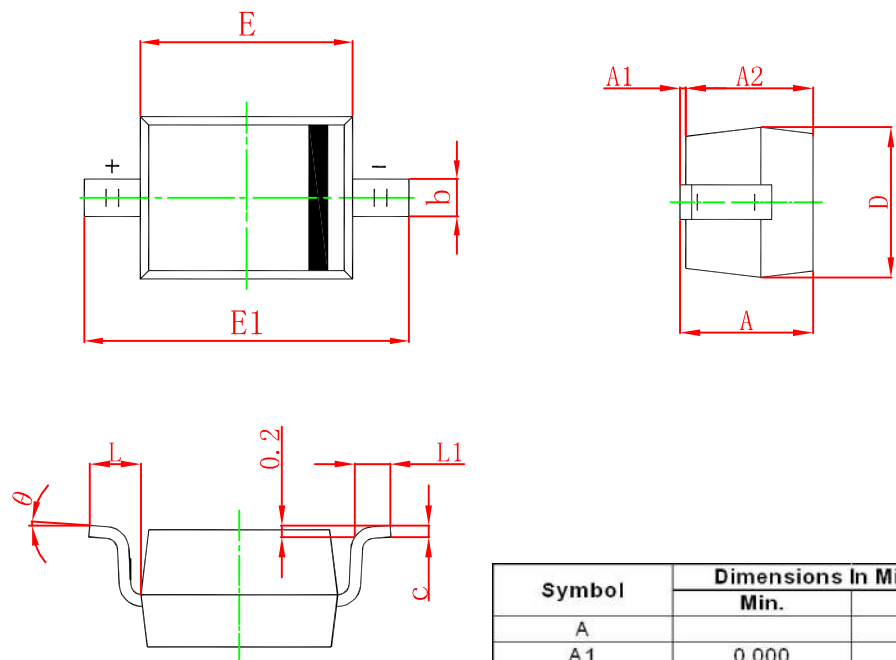
### ELECTRICAL CHARACTERISTICS( $T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=1\text{mA}$	10			V
Reverse current	$I_R$	$V_R=5\text{V}$			15	$\mu\text{A}$
		$V_R=8\text{V}$			25	$\mu\text{A}$
Forward voltage	$V_F$	$I_F=100\text{mA}$			0.38	V
		$I_F=500\text{mA}$			0.5	
		$I_F=1000\text{mA}$			0.6	
Total capacitance	$C_{tot}$	$V_R=5\text{V}, f=1\text{MHz}$		30		pF

**Typical Characteristics**

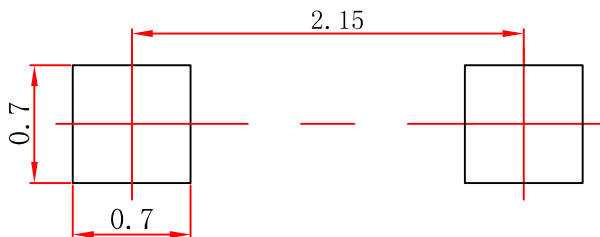


**SOD-323 Package Outline Dimensions**



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	2.550	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°

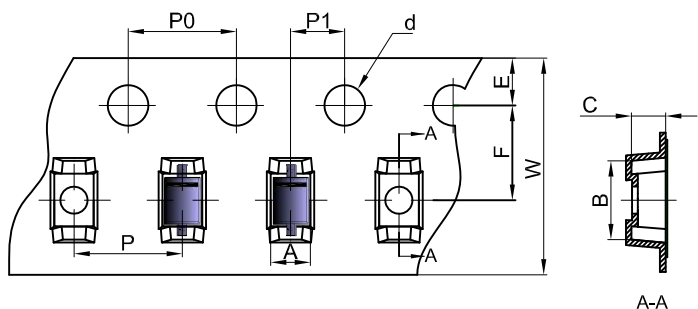
**SOD-323 Suggested Pad Layout**



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

**SOD-323 Tape and Reel**

**SOD-323 Embossed Carrier Tape**

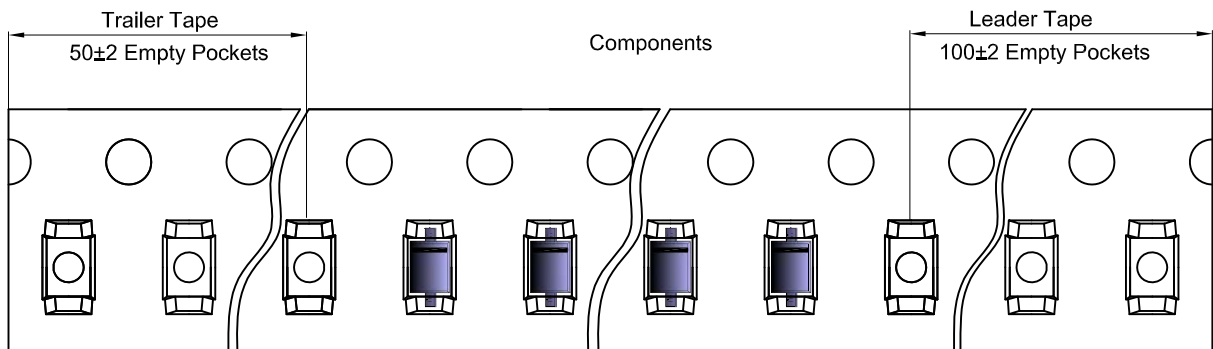


**Packaging Description:**  
 SOD-323 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed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

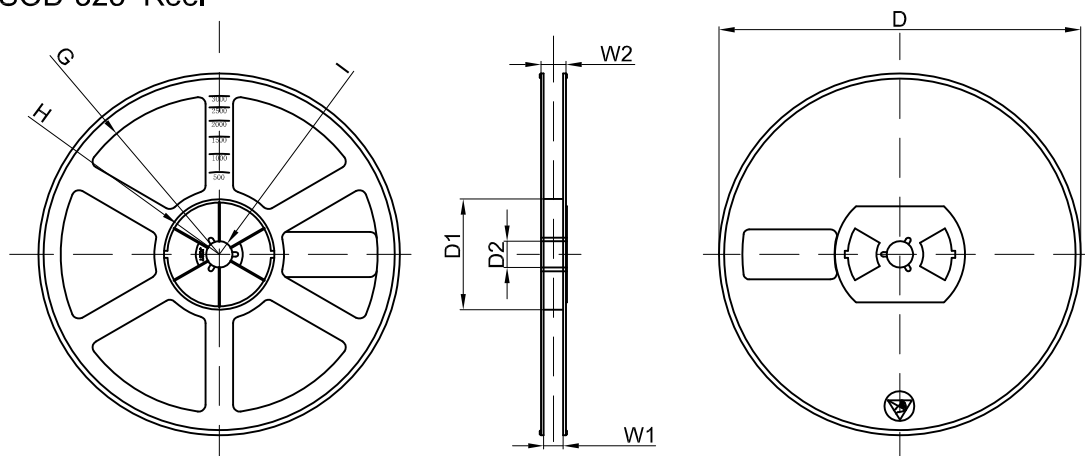
Dimensions are in millimeter

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	