

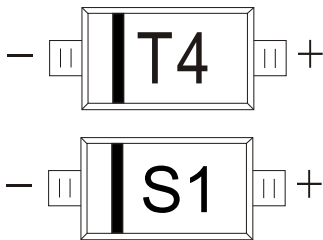
SOD-323 Plastic-Encapsulate Diodes

FAST SWITCHING DIODE

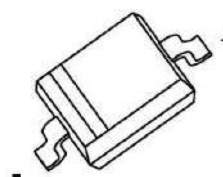
Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

MARKING: T6,T4,S1

1N4148WS	BAV16WS
	

SOD-323



Maximum Ratings and Electrical Characteristics, Single Diode @T_a=25°C

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	75	V
Forward Continuous Current	I _{FM}	420	mA
Average Rectified Output Current	I _O	300	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	2.5	A
Power Dissipation	P _d	350	mW
Thermal Resistance from Junction to Ambient	R _{θJA}	625	°C/W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{STG}	-55~+150	°C

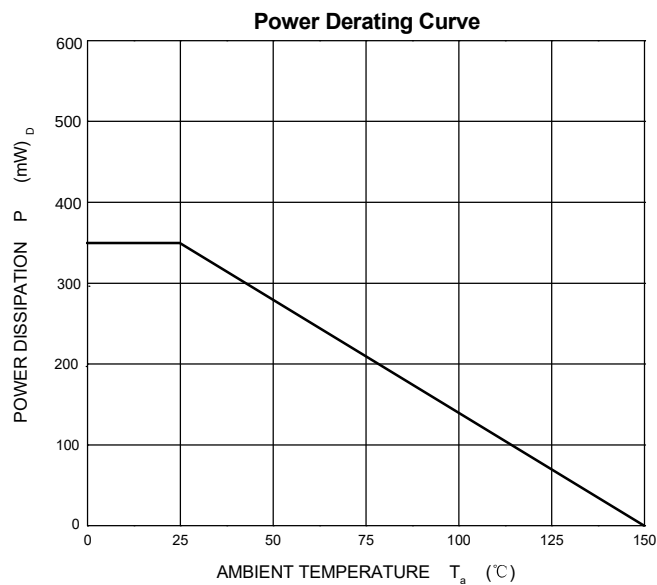
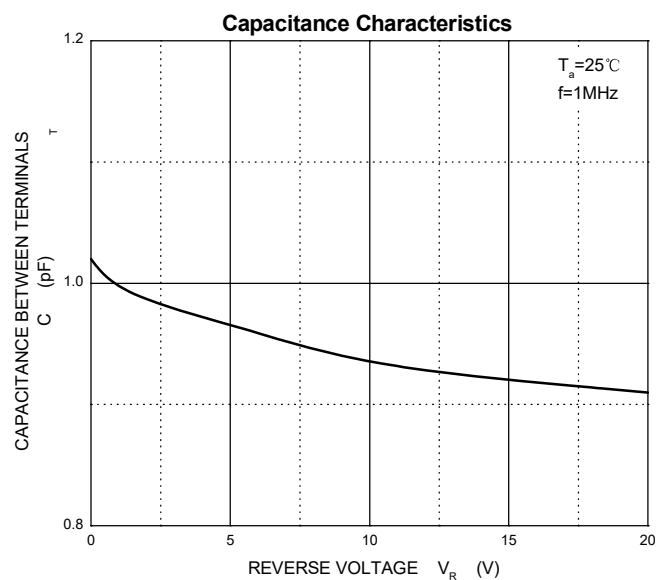
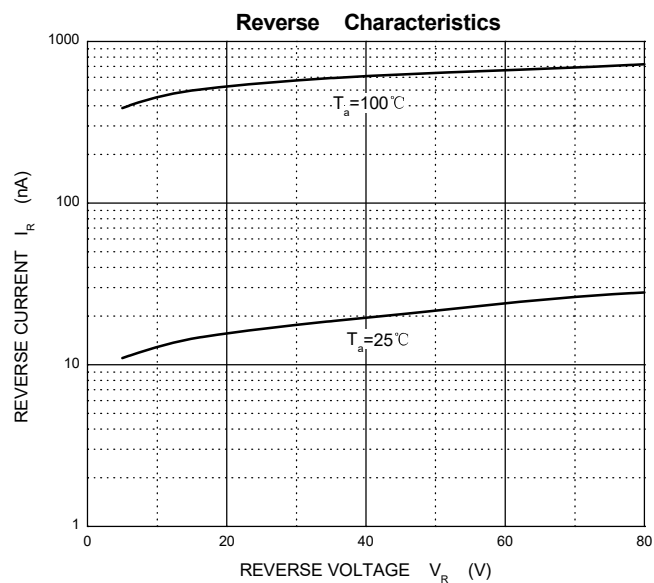
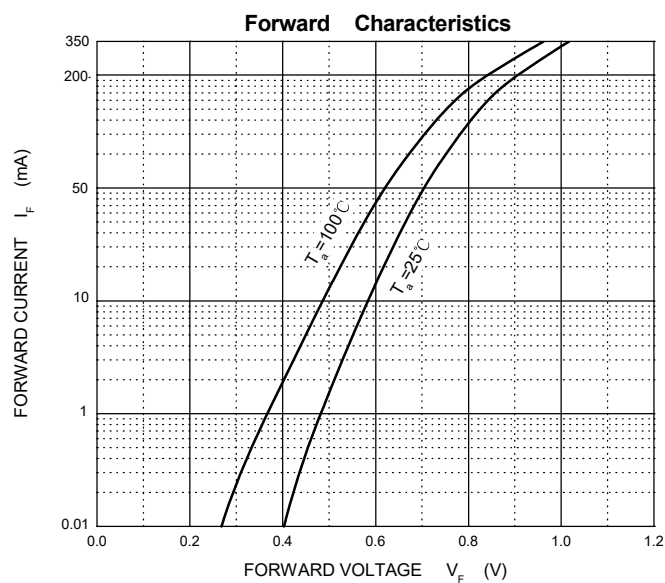
Typical Characteristics

ELECTRICAL CHARACTERISTICS

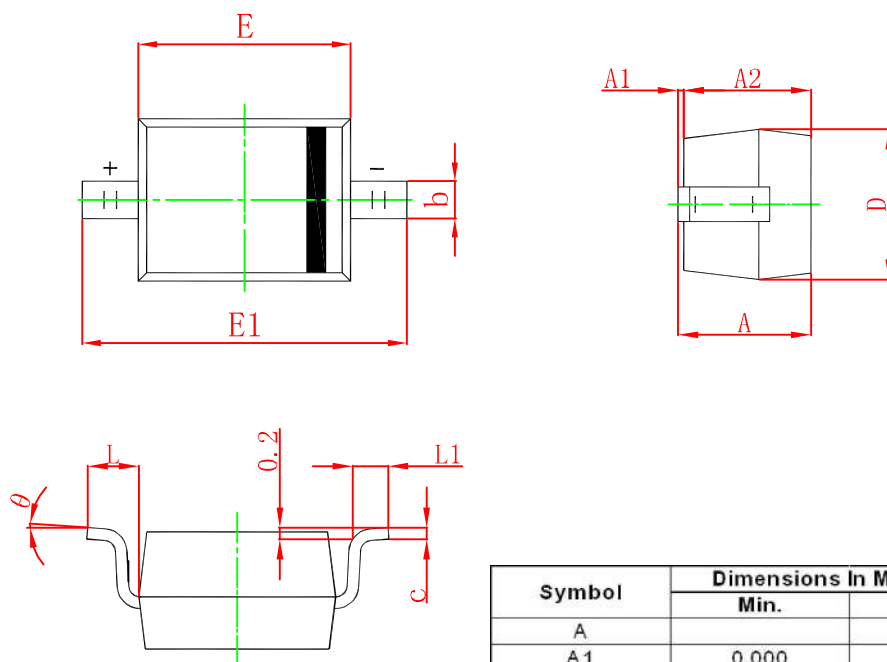
Electrical Ratings @Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_{F1}			0.715	V	$I_F = 10\text{mA}$
	V_{F2}			0.855	V	$I_F = 50\text{mA}$
	V_{F3}			1.0	V	$I_F = 150\text{mA}$
	V_{F4}			1.25	V	$I_F = 300\text{mA}$
Reverse current	I_{R1}			1	μA	$V_R = 75\text{V}$
	I_{R2}			25	nA	$V_R = 20\text{V}$
Capacitance between terminals	C_T			2	pF	$V_R = 0\text{V}, f = 1\text{MHz}$
Reverse recovery time	t_{rr}			4	ns	$I_F = I_R = 10\text{mA}$ $I_{rr} = 0.1 I_R, R_L = 100\Omega$

Typical Characteristics

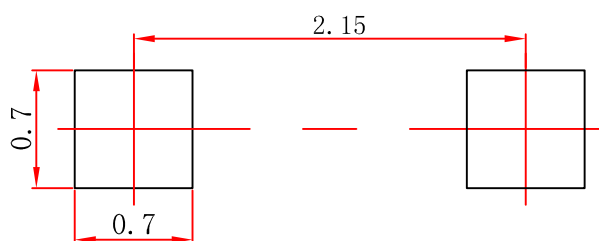


SOD-323 Package Outline Dimensions



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

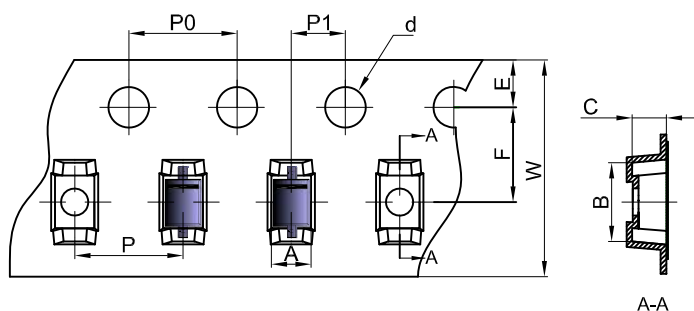


Note:

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

SOD-323 Tape and Reel

SOD-323 Embossed Carrier Tape

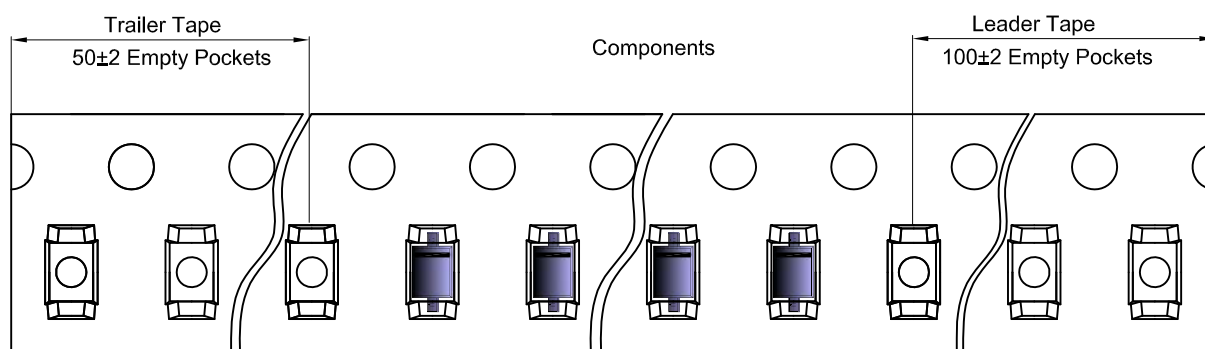


Packaging Description:

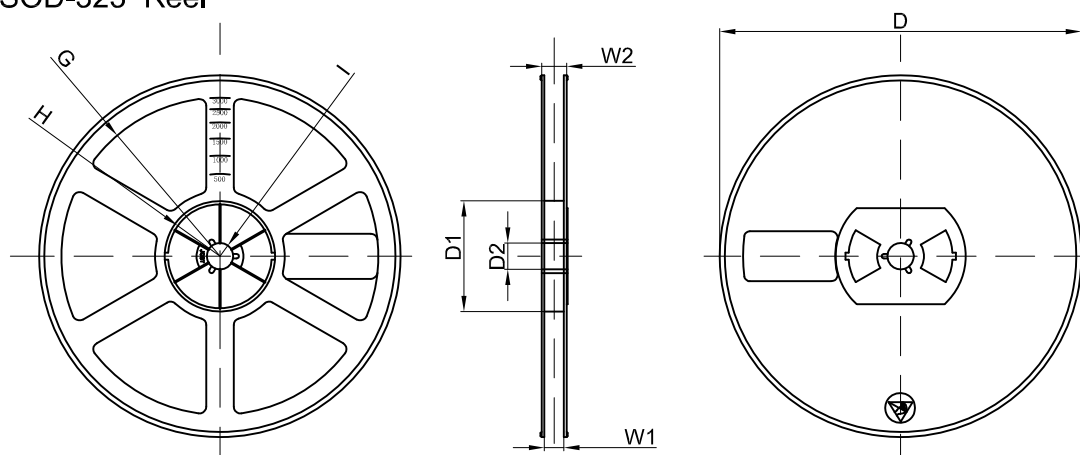
SOD-323 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts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