

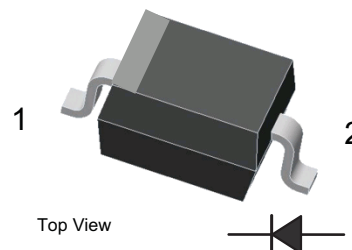
Switching Diodes

1N4148WS

■ Features

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

SOD-323



PIN DESCRIPTION

PIN	DESCRIPTION
1	Cathode
2	Anode

■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Reverse Voltage	V _{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V _{RRM}	100	
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	71	mA
Average Rectified Output Current	I _O	150	
Forward Continuous Current	I _{FM}	300	
Peak Forward Surge Current @ t=1us	I _{FSM}	2	A
@ t =1s		1	
Power Dissipation	P _d	500	mW
Thermal Resistance Junction to Ambient	R θ JA	250	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature range	T _{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R=100\mu A$	100			V
Forward voltage	V_{F1}	$I_F=1mA$			0.715	
	V_{F2}	$I_F=10mA$			0.855	
	V_{F3}	$I_F=50mA$			1	
	V_{F4}	$I_F=150mA$			1.25	
Reverse voltage leakage current	I_{R1}	$V_R=75V$			1	μA
	I_{R2}	$V_R=20V$			25	nA
Junction capacitance	C_j	$V_R=0V, f=1MHz$			2	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10mA, I_{rr}=0.1I_R, R_L=100\Omega$			4	ns

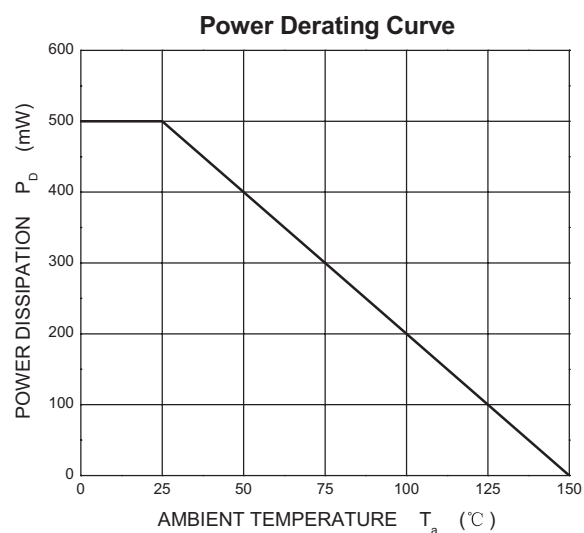
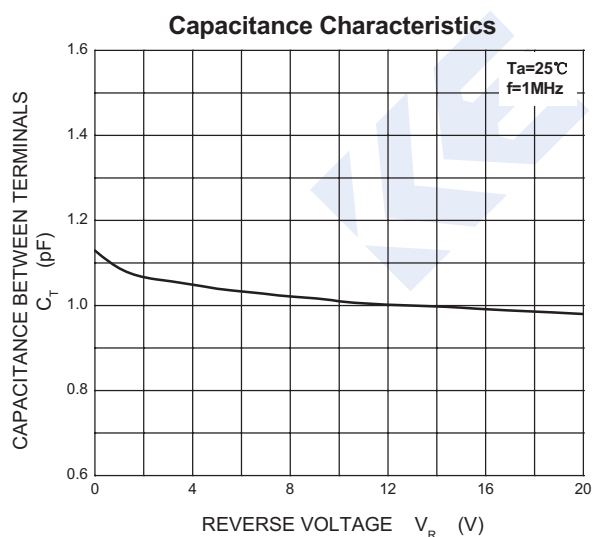
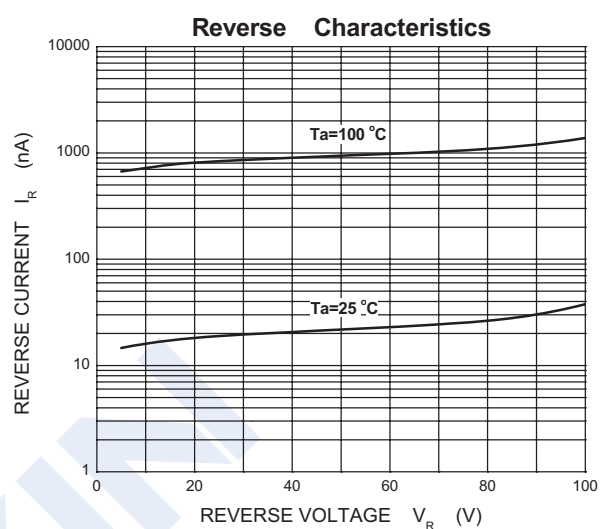
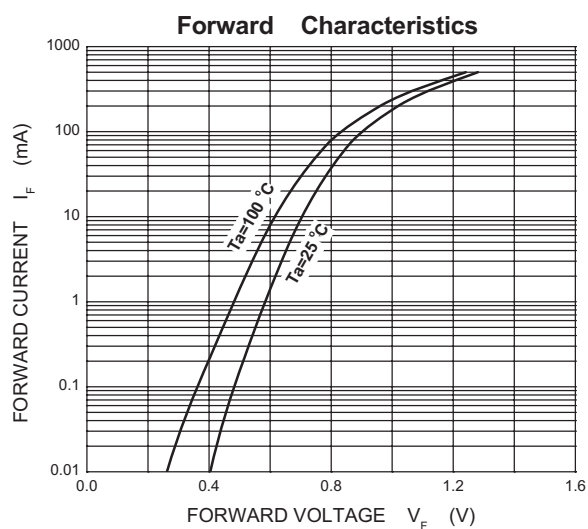
■ Marking

Marking	A
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■ Typical Characteristics



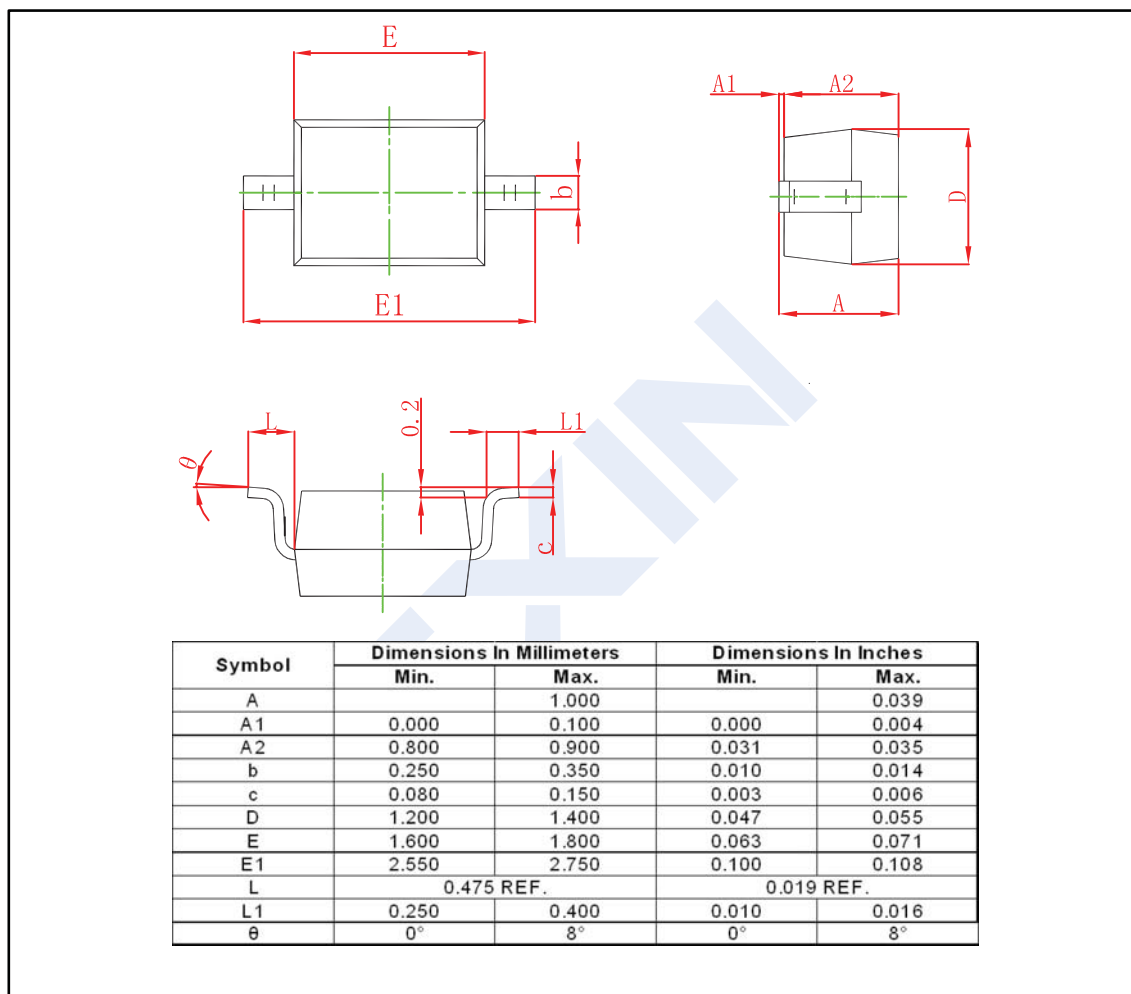
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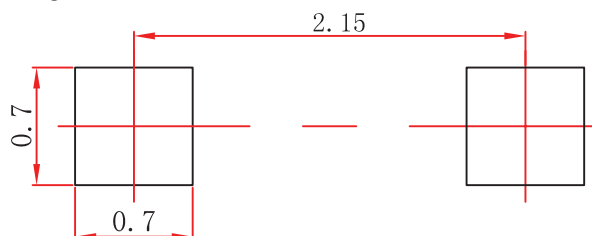
■ Package Outline Dimensions

Plastic surface mounted package; 2 leads

SOD-323



■ The Recommended Mounting Pad Size

**Note:**

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