

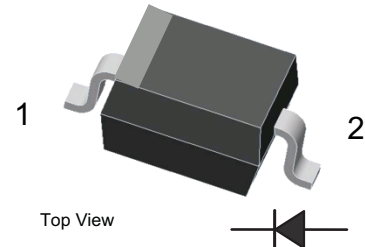
Switching Diodes

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	A
Peak Forward Surge Current @ t=1us	I _{FSM}	2	
@ t=1s		1	
Power Dissipation	P _d	500	mW
Thermal Resistance Junction to Ambient	R _{θJA}	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 uA	100			V
Forward voltage	V _{F1}	I _F = 1mA			0.715	
	V _{F2}	I _F = 10 mA			0.855	
	V _{F3}	I _F = 50 mA			1	
	V _{F4}	I _F = 150 mA			1.25	
Reverse voltage leakage current	I _{R1}	V _R = 75 V			1	uA
	I _{R2}	V _R =20 V			25	nA
Junction capacitance	C _j	V _R = 0 V, f= 1 MHz			2	pF
Reverse recovery time	t _{rr}	I _F =I _R =10mA, I _{rr} =0.1xI _R , R _L =100Ω			4	ns

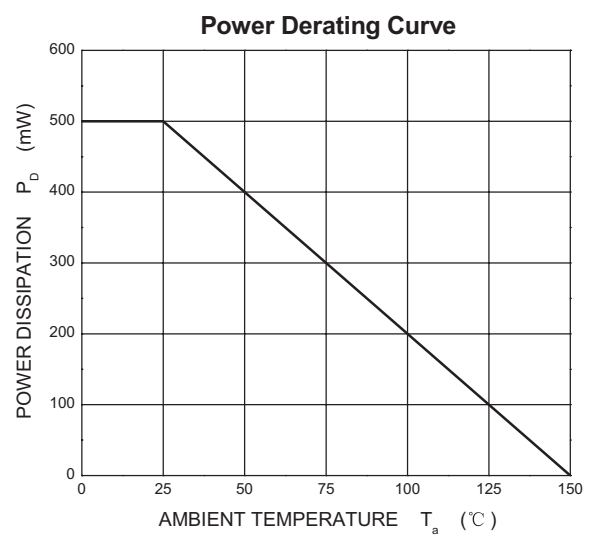
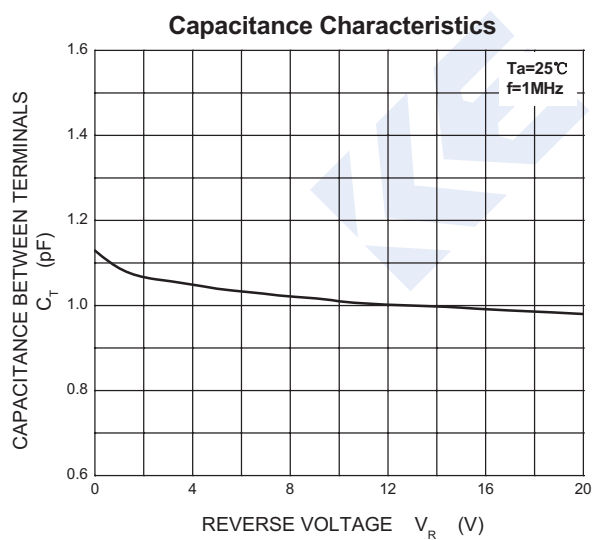
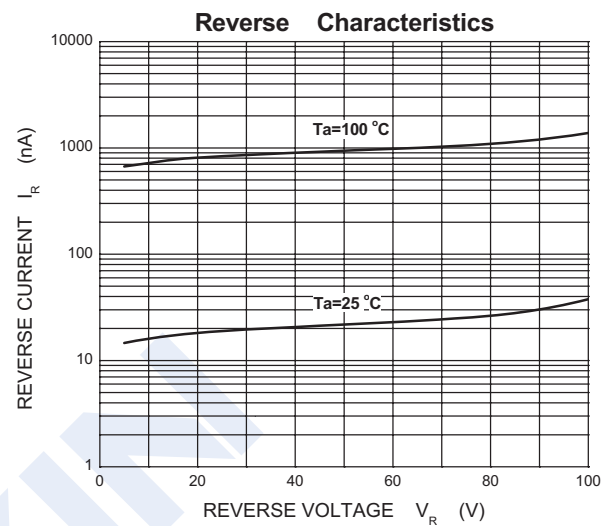
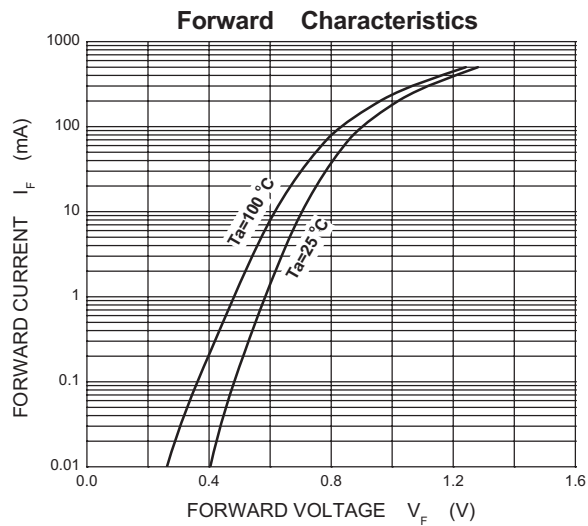
■ Marking

Marking	A
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■ Typical Characteristics



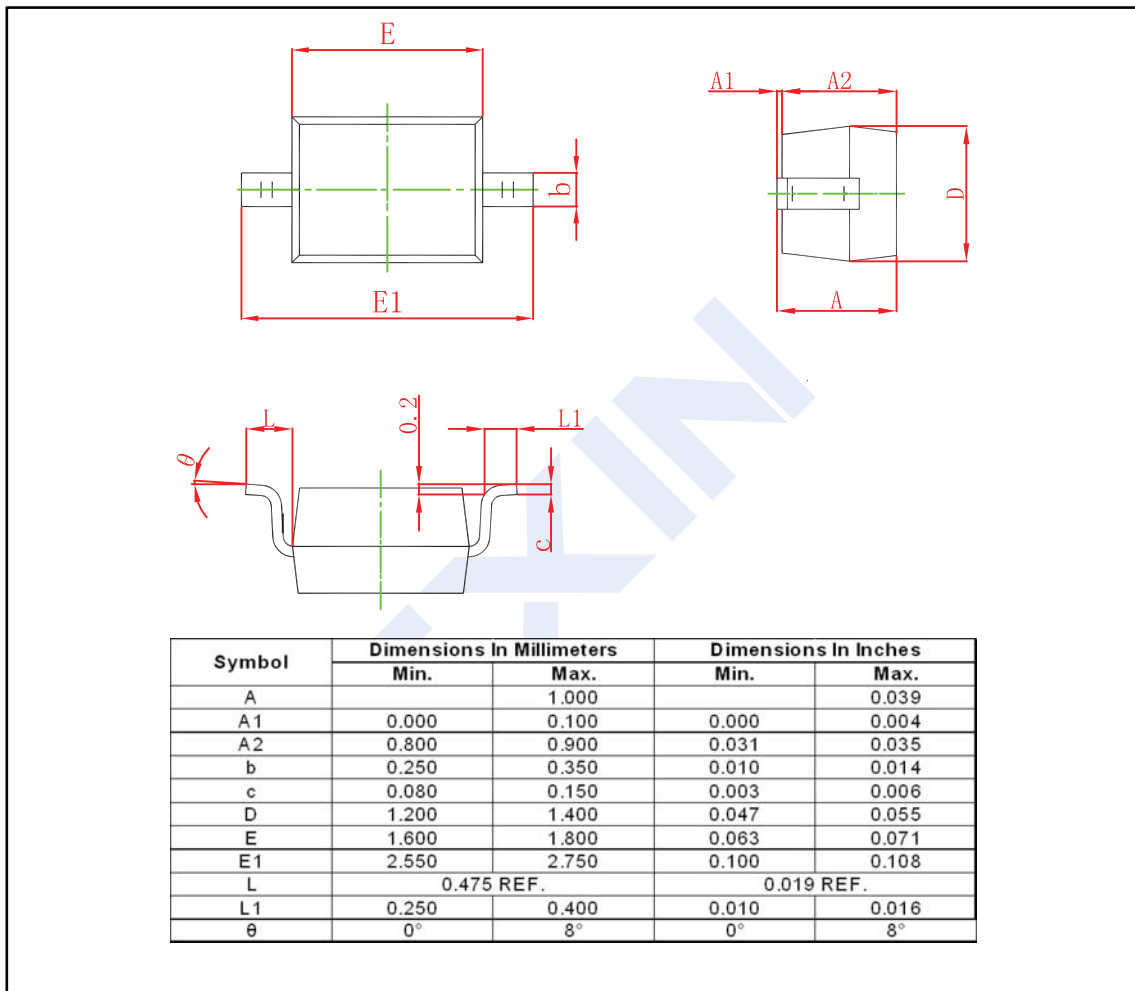
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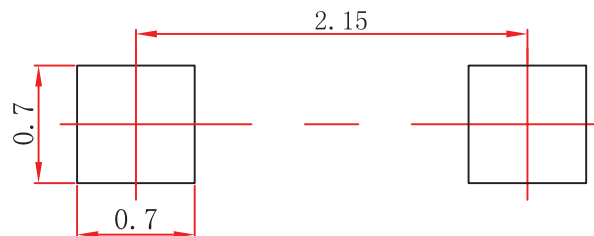
■ Package Outline Dimensions

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.