

SOD-323L

Features

- Fast Switching Device (TRR <4.0 nS)
- General Purpose Diodes
- Flat Lead SOD-323L Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

Ordering Information

Part No.	Package	Packing
1N4148WS-L	SOD-323L	3000 / Tape & Reel
1N4448WS-L		
1N914BWS-L		

Mechanical Data (TA=25°C unless otherwise noted)

Absolute Maximum Ratings T_A = 25°C unless otherwise noted

Parameter	Symbol	Value	Units
Power Dissipation	P _D	200	mW
Storage Temperature Range	T _{STG}	-65~150	°C
Operating Junction Temperature	T _J	150	°C
Non-Repetitive Peak Reverse Voltage	V _{RBM}	100	V
Repetitive Peak Reverse Voltage	V _{RBM}	75	V
Repetitive Peak Forward Current	I _{FRM}	300	mA
Continuous Forward Current	I _O	150	mA
Peak Forward Surge Current (Pulse Width=1us)	I _{FSM}	2	A

These ratings are limiting values above which the serviceability of the diode may be impaired.

Device Marking Code

Device Type	Device Marking
1N4148WS-L	S1
1N4448WS-L	S2
1N914BWS-L	S3

Electrical Characteristics (T_A=25°C unless otherwise noted)

Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
B _V	Breakdown Voltage	I _R =100μA	100	-	V
		I _R =5μA	75	-	
I _R	Reverse Leakage Current	V _R =20V	-	25	nA
		V _R =75V	-	5	μA
V _F	Forward Voltage	1N4448WS-L, 1N914BWS-L I _F =5mA	0.62	0.72	V
		1N4148WS-L I _F =10mA	-	1	
		1N4448WS-L, 1N914BWS-L I _F =100mA	-	1	
T _{RR}	Reverse Recovery Time	I _F =10mA I _R =60mA R _L =100Ω I _{RR} =1mA	-	4	ns
C	Capacitance	V _R =0V, f=1MHz	-	4	pF

Rating and Characteristics Curvers

Fig 1 Total Capacitance

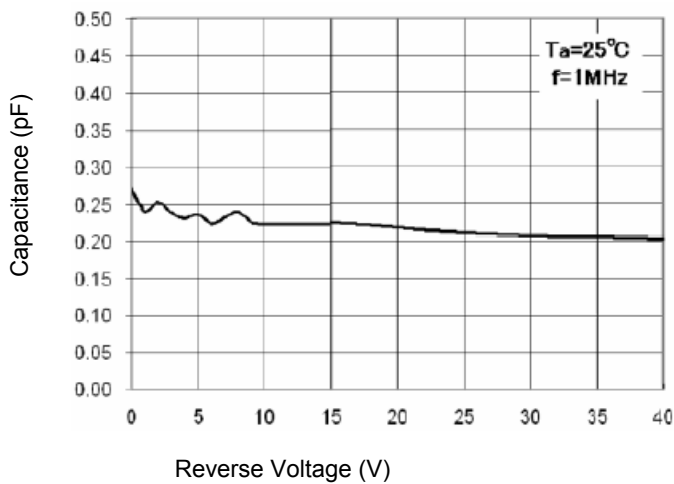


Fig 2 Forward Voltage vs Ambient Temperature

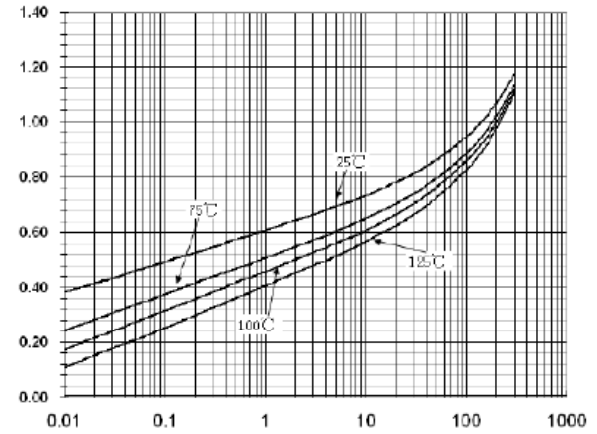


Fig 3 Power Derating Curve

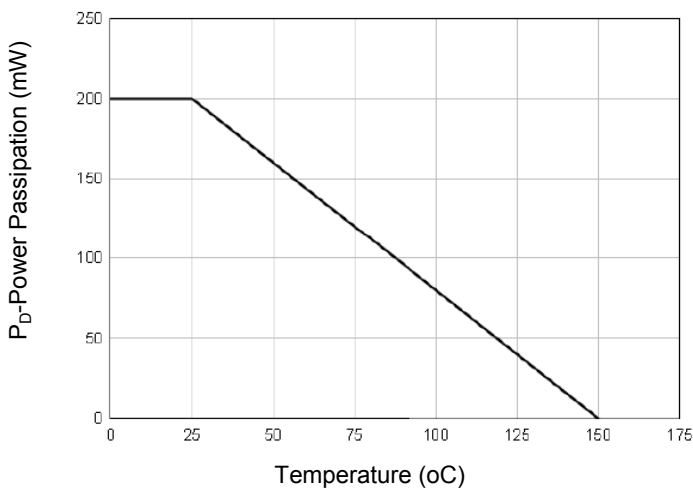
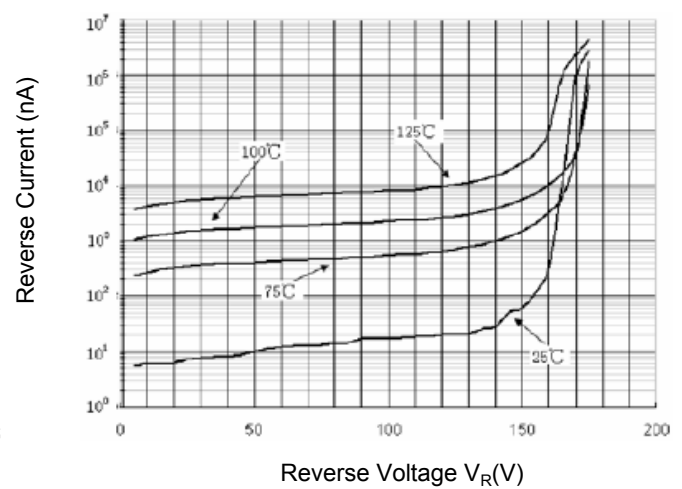
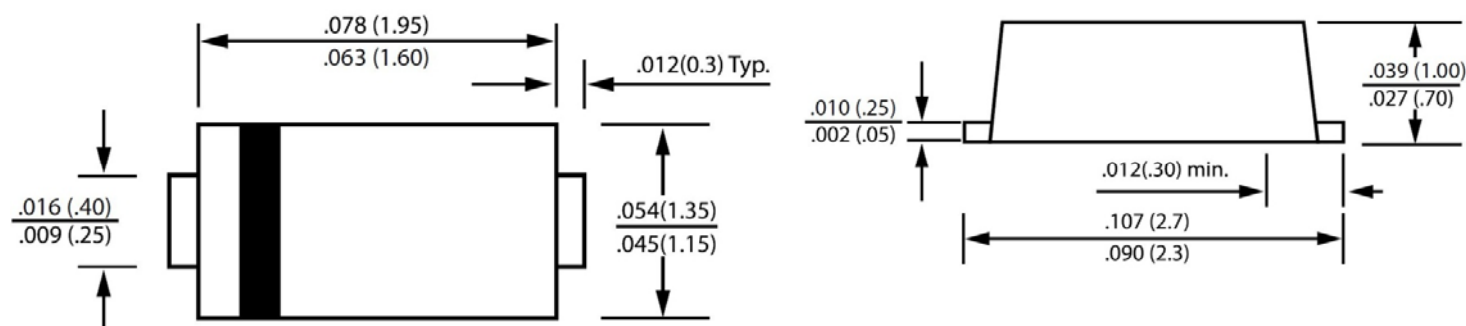


Fig 3 Reverse Current vs Reverse Voltage



Package Outline Dimensions

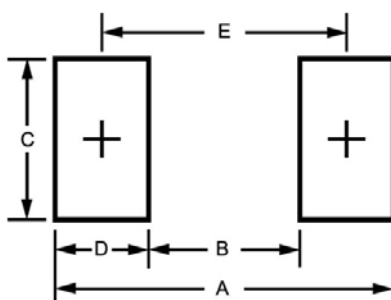


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Dimensions in inches and (millimeters)

Suggested Pad Layout

Outline Symbol	SOD-323L millimeters
A	3.75
B	1.05
C	0.90
D	0.80
E	2.40



Tap & Reel Specification

ITEM	SYMBOL	SOD-323L (mm)
Carrier width	A	1.4±0.1
Carrier length	B	2.8±0.1
Carrier depth	C	1.0±0.1
Sprocket hole	d	1.55±0.05
Reel outside diameter	D	180+0/-3
Reel inner diameter	D1	60+1/-0
Feed Hole diameter	D2	13±0.2
Sprocket hole position	E	1.75±0.1
Punch hole position	F	3.5±0.05
Punch hole pitch	P	4.0±0.1
Sprocket hole pitch	P0	4.0±0.1
Embossment center	P1	2.0±0.05
Overall tape thickness	T	0.6max
Tape width	W	8.0±0.2
Reel width	W1	9.0±0.3

