Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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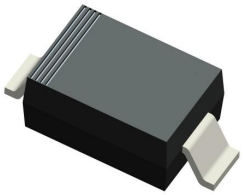
Technical Data
Data Sheet N0572, Rev. B

1N4148WS SURFACE MOUNT FAST SWITCHING DIODE



SOD-323

Features

- High Conductance
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- Small Package
- For General Purpose Switching Application
- This is a Pb − Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Schematic & Pin Configuration

Mechanical Characteristics

- Case: SOD-323, Molded plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.04 grams(approx)

Maximum Ratings @T_A=25°C unless otherwise specified

Characteristic	Symbol	Limits	Unit
Non- Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current(Note 1)	I_F	300	mA
Average Rectified Output Current(Note 1)	I_O	150	mA
Non-Repetitive Peak Forward Surge Current @t=1.0us @t=1.0s	I_{FSM}	2.0 1.0	A
Power Dissipation(Note 1)	P_D	200	mW
Typical Thermal Resistance, Junction to Ambient(Note 1)	$R_{\theta JA}$	625	°C/W
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	°C

Note: 1. Valid provided that terminals are kept at ambient temperature.

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RoHS

Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Units	Test Condition
Forward Voltage*	V_{FM}	-	0.715 0.855 1.0 1.25	V	@I_F=1.0mA @I_F=10mA @I_F=50mA @I_F=150mA
Reverse Leakage Current*	I_{RM}	-	2.5	uA	@V_R=75V
Capacitance	C_T	-	2	pF	V_R=0V, f=1.0MHz
Reverse Recovery Time	t_{rr}	-	4	ns	I_F=I_R=10mA I_{rr}=0.1XI_R,R_L=100Ω

* Pulse width < 300 μs, duty cycle < 2%

Ratings and Characteristics Curves

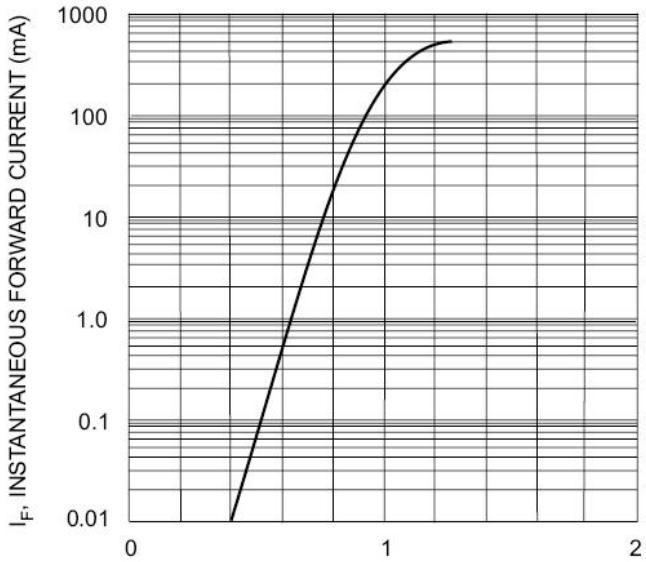

Fig. 1 Forward Characteristics

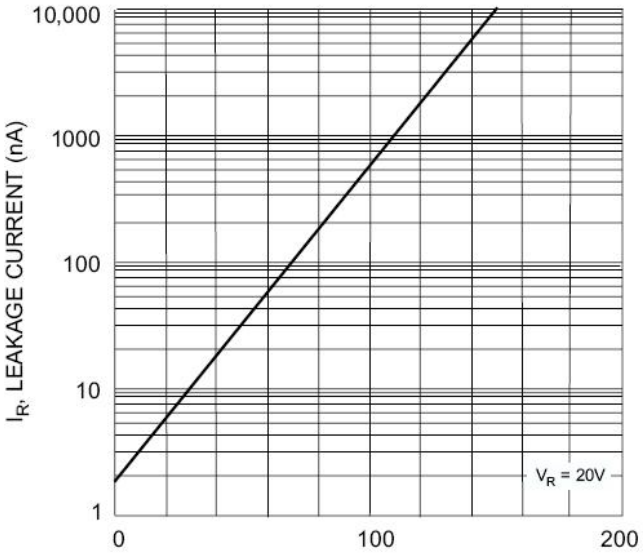

Fig. 2 Leakage Current vs Junction Temperature

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RoHS

Ordering Information

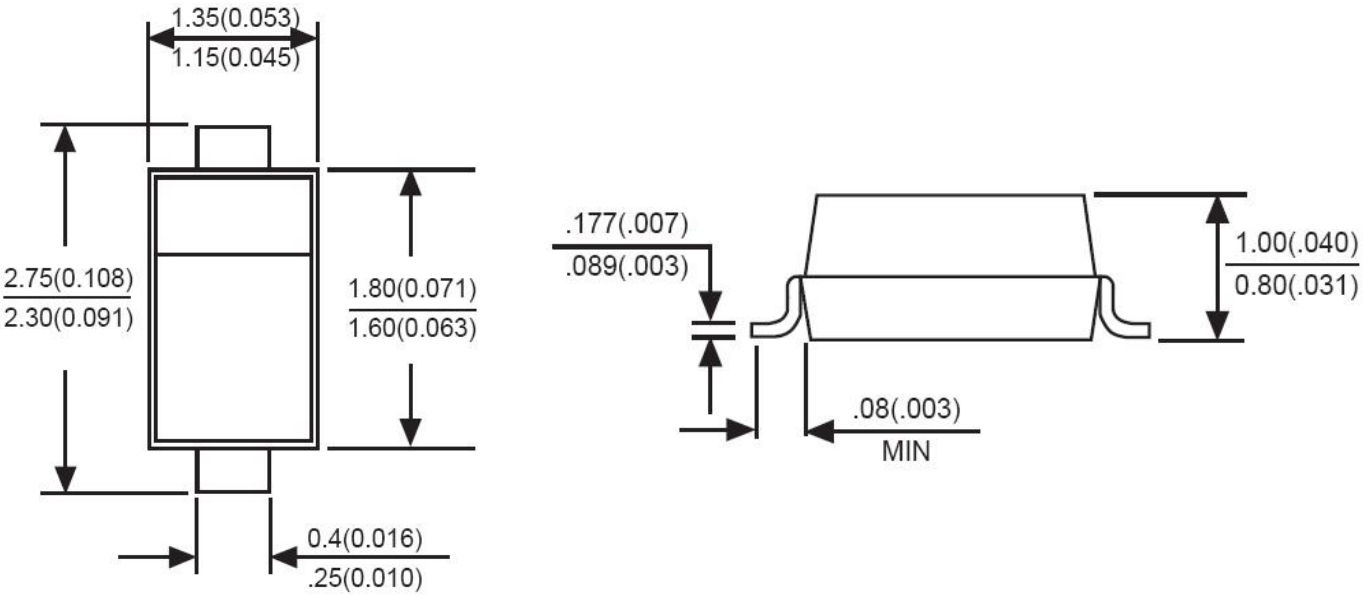
Device	Package	Shipping
1N4148WS	SOD-323 (Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

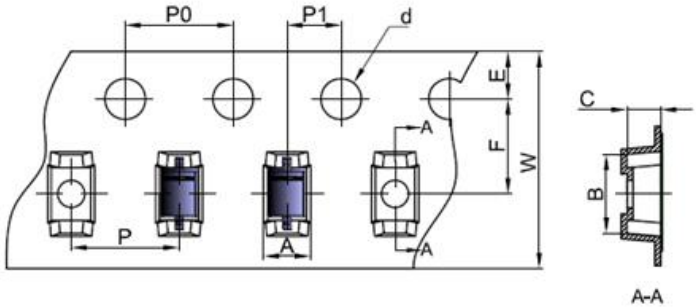
Marking Diagram

T4 = Marking Code

Mechanical Dimensions SOD-323



Carrier Tape Specification SOD-323



SYMBOL	Millimeters	
	Min.	Max.
B	2.85	2.95
C	1.20	1.30
d	1.40	1.60
E	1.65	1.85
F	3.40	3.60
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
W	7.90	8.30

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