



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!



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1N4148W FAST SWITCHING DIODE



Features

- Small Package
- Low Reverse Current
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: SOD-123, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Marking: T4
- Weight: 0.01 grams(approx)

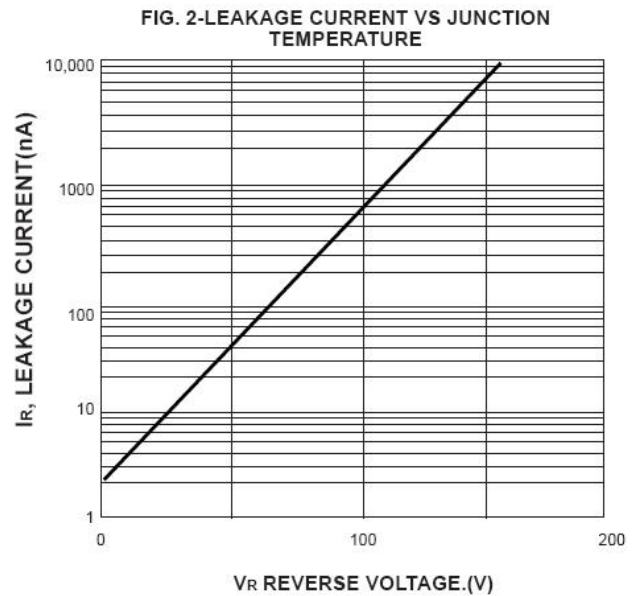
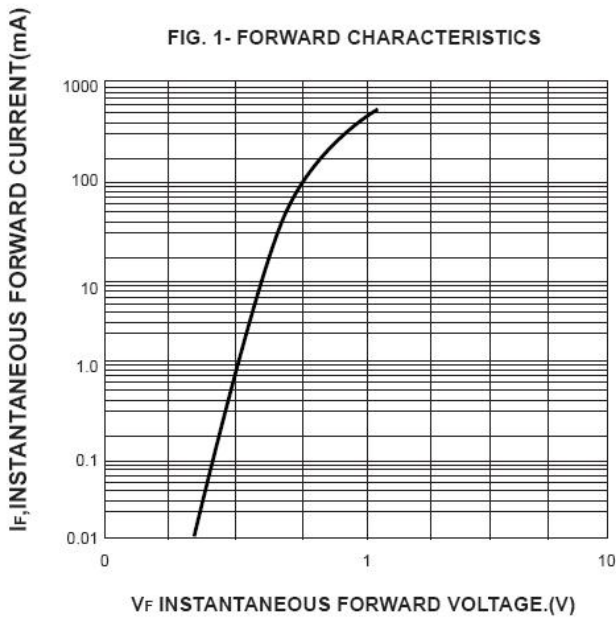
Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Characteristic	Symbol	Limits	Unit
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	I_F	300	mA
Average Rectified Output Current	I_O	150	mA
Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	2.0	A
Power Dissipation	P_D	400	mW
Typical Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	315	$^{\circ}\text{C/W}$
Junction Temperature Range	T_J	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

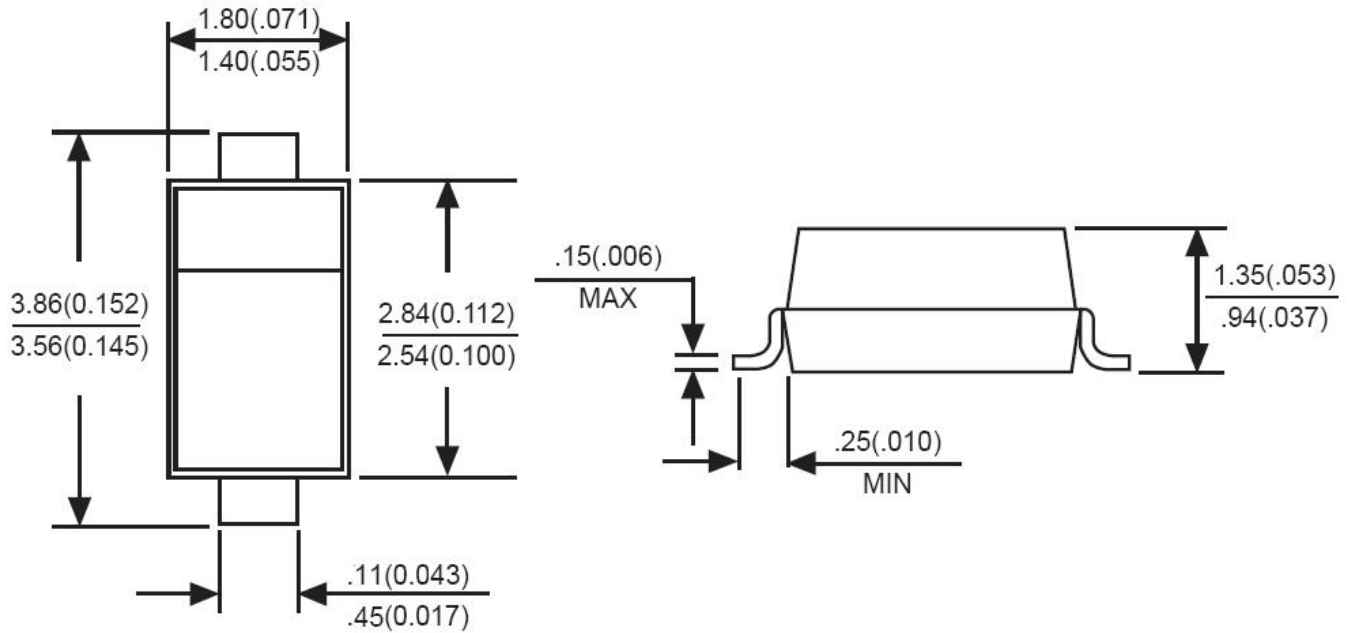
Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Units	Test Condition
Forward Voltage	V _{FM}	-	0.715 0.855 1.00 1.25	V	@I _F =1mA @I _F =10mA @I _F =50mA @I _F =150mA
Reverse Leakage Current	I _{RM}	-	2.5 25	uA nA	@V _R =75V @V _R =20V
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} =0.1X I _R , R _L =100Ω

Ratings and Characteristics Curves



Mechanical Dimensions SOD-123(Millimeters/Inches)



Ordering Information

Device	Package	Shipping
1N4148W	SOD-123 (Pb-Free)	3000pcs / reel

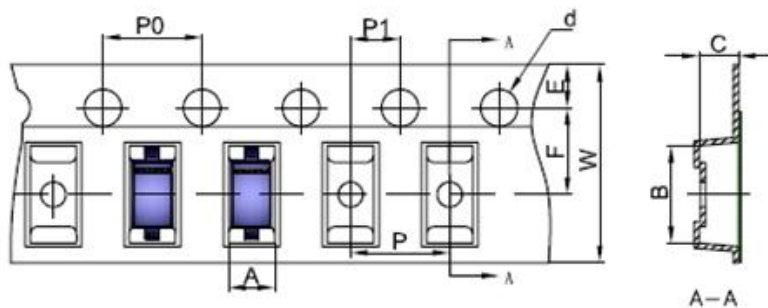
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram



T4 = Marking code

Carrier Tape Specification SOD-123



SYMBOL	Millimeters	
	Min.	Max.
A	1.80	1.90
B	3.89	3.99
C	1.52	1.62
d	1.45	1.65
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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