

1N4148WX

High Speed Switching Diode 500mW

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- Fast Switching Speed

Mechanical Data

- Marking : T4
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Indicated by Cathode Band
- Weight: 0.008 grams (approx.)
- Moisture Sensitivity: Level 1 per J-STD-020C
- Epoxy meets UL 94 V-0 flammability rating
Moisture Sensitivity Level 1

Maximum Ratings @ 25°C Unless Otherwise Specified

Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Average Rectified Current	$I_{F(AV)}$	300 ⁽¹⁾	mA
Peak Forward Surge Current t<1S	I_{FSM}	2.0	A
Power Dissipation	P_D	500	mW
Thermal Resistance	R_{JA}	315	K/W
Operation/Storage Temp. Range	T_j, T_{STG}	-55 to +150	°C

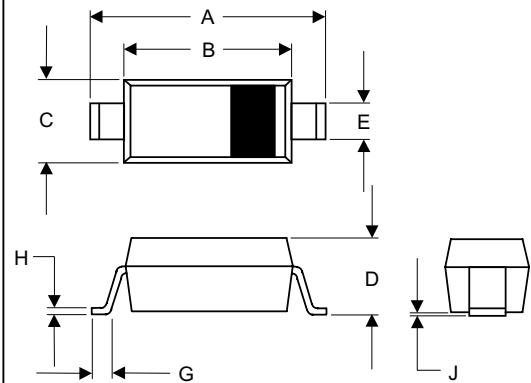
Electrical Characteristics @ 25°C Unless Otherwise Specified

Maximum Instantaneous Forward Voltage	V_F	1.0V	$I_{FM} = 50mA;$ $T_J = 25^\circ C$ (Note 1)
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	25nA 50µA 5.0uA	$V_R=20Volts$ $T_J = 25^\circ C$ $T_J = 150^\circ C$ $V_R=75V, T_J=25^\circ C$
Typical Junction Capacitance	C_J	4pF	$V_F=V_R=0V$
Maximum Reverse Recovery Time	T_{rr}	4nS	$I_F=50mA$ $I_{rr} = 0.1I_R$ $R_L=100\Omega$

Notes:

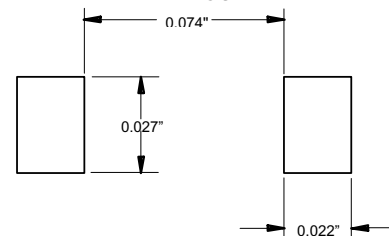
1. Valid provided that terminals are kept at ambient temperature

SOD323



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	-----	.006	-----	0.15	

SUGGESTED SOLDER PAD LAYOUT



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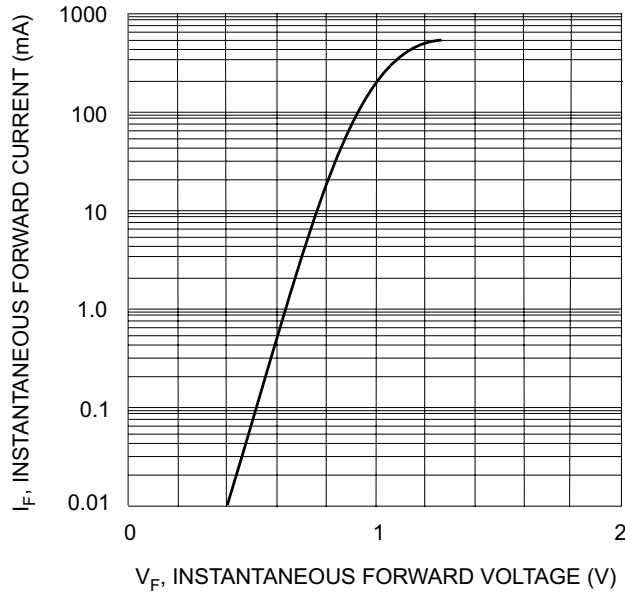


Fig. 1 Forward Characteristics

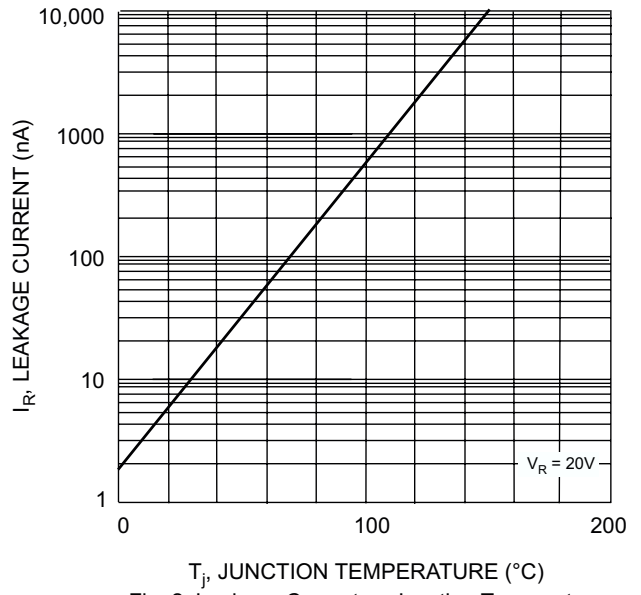


Fig. 2 Leakage Current vs Junction Temperature



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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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