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# 1N4148WX

## High Speed Switching Diode 500mW

### Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

### Mechanical Data

- Case: SOD-323, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Indicated by Cathode Band
- Weight: 0.008 grams ( approx.)

### Maximum Ratings @ 25°C Unless Otherwise Specified

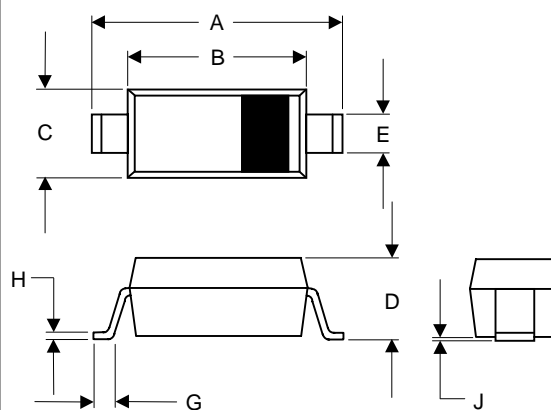
Reverse Voltage	$V_R$	100	V
Peak Reverse Voltage	$V_{RM}$	75	V
Average Rectified Current	$I_{F(AV)}$	300 <sup>(1)</sup>	mA
Peak Forward Surge Current $t < 1S$	$I_{FSM}$	2.0	A
Power Dissipation	$P_D$	500	mW
Thermal Resistance	$R_{JA}$	315	K/W
Operation/Storage Temp. Range	$T_j, T_{STG}$	-55 to +150	°C

### Electrical Characteristics @ 25°C Unless Otherwise Specified

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

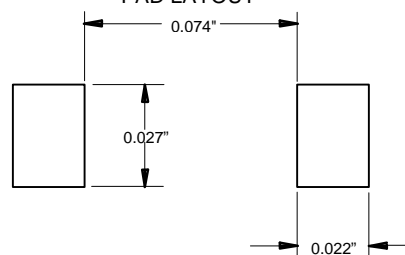
\* Valid provided that terminals are kept at ambient temperature

### 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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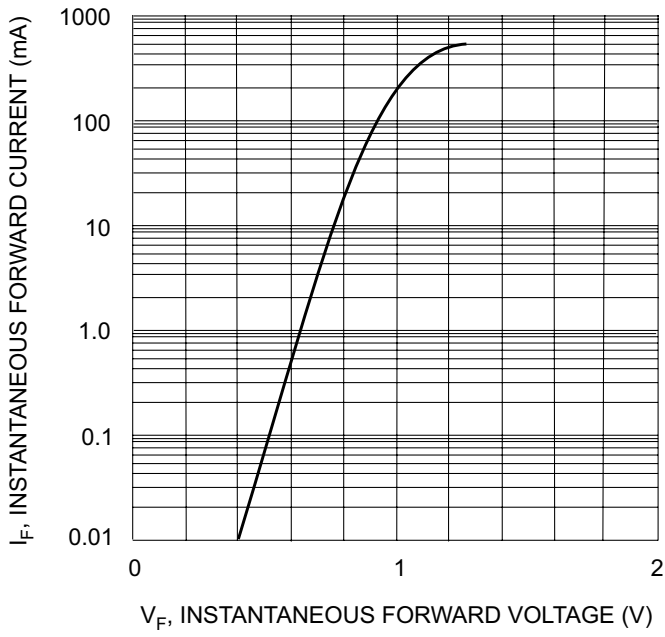


Fig. 1 Forward Characteristics

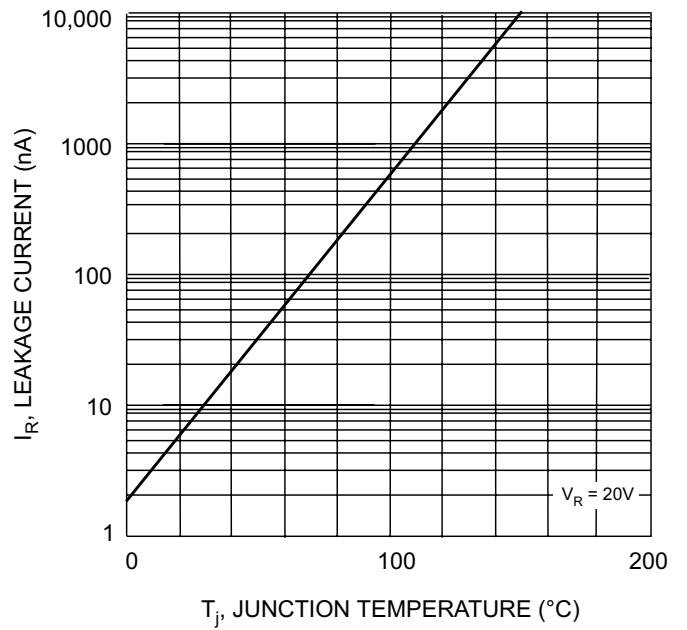


Fig. 2 Leakage Current vs Junction Temperature