

**Micro Commercial Components** 

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### 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

# **Mechanical Data**

Fast Switching Speed

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

Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

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

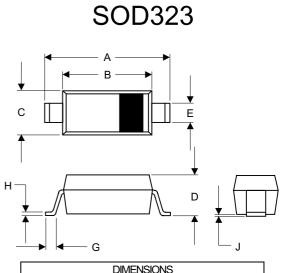
Reverse Voltage	$V_R$	100	V
Peak Reverse Voltage	$V_{RM}$	75	V
Average Rectified Current	I <sub>F(AV)</sub>	300 <sup>(1)</sup>	mA
Peak Forward Surge Current t<1S	I <sub>FSM</sub>	2.0	Α
Power Dissipation	$P_{D}$	500	mW
Thermal Resistance	$R_{JA}$	315	K/W
Operation/Storage Temp. Range	$T_{j}, T_{STG}$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

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

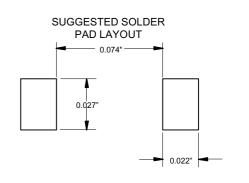
			<b>-</b>
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.0V	$I_{FM} = 50 \text{mA};$ $T_J = 25^{\circ}\text{C (Note 1)}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	25nA 50μA 5.0uA	$V_R$ =20Volts $T_J$ = 25°C $T_J$ = 150°C $V_R$ =75V, $T_J$ =25°C
Typical Junction Capacitance	CJ	4pF	V <sub>F</sub> =V <sub>R</sub> =0V
Maximum Reverse Recovery Time	T <sub>rr</sub>	4nS	$I_F$ =50mA $I_{rr}$ = 0.1 $I_R$ $R_L$ =100 $\Omega$

Notes:

1. Valid provided that terminals are kept at ambient temperature

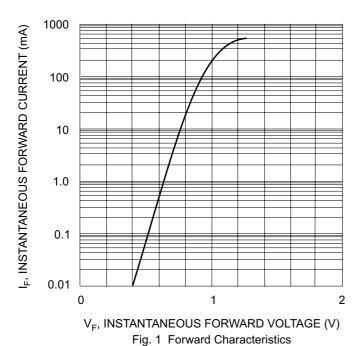


DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
Α	.090	.107	2.30	2.70	
В	.063	.071	1.60	1.80	
С	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
Е	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
Н	.004	.010	0.10	0.25	
J		.006		0.15	





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10,000 100 100 200

T<sub>j</sub>, JUNCTION TEMPERATURE (°C) Fig. 2 Leakage Current vs Junction Temperature



#### **Ordering Information**

Device	Packing
(Part Number)-TP	Tape&Reel3Kpcs/Reel

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