

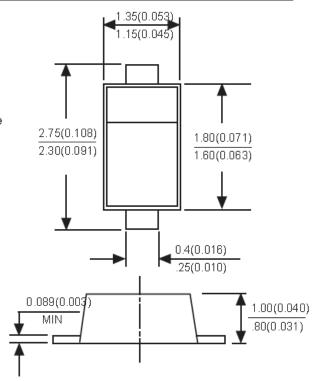
### Technical Data Data Sheet N0572, Rev. A Features

**Green Products** 

- High Conductance
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Application
- Plastic Material UL Recognition Flammability Classification 94V-O
- Green Products in Compliance with the RoHS Directive
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

# **Mechanical Data**

- Case: SOD-323, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.004 grams (approx.)
- Marking: T4



Dimensions in millimeters and (inches)

## Maximum Ratings @T<sub>A</sub>=25°C unless otherwise specified

Characteristic		Symbol	1N4148WS	Unit
Non-Repetitive Peak Reverse Voltage		VRM	100	٧
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		VRRM VRWM VR	75	٧
RMS Reverse Voltage		VR(RMS)	53	٧
Forward Continuous Current (Note 1)		lғм	300	mA
Average Rectified Output Current (Note 1)		lo	150	mA
	@ t = 1.0µs @ t = 1.0s	IFSM	2.0 1.0	Α
Power Dissipation (Note 1)		Pd	200	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)		RθJA	625	K/W
Operating and Storage Temperature Range		Tj, Tstg	-65 to +150	°C

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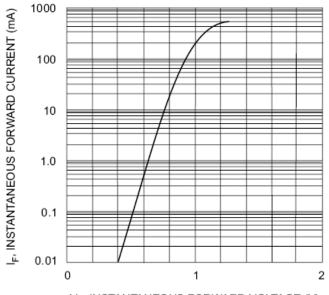
Technical Data Data Sheet N0572, Rev. A **Green Products** 

# Electrical Characteristics @TA=25°C unless otherwise specified

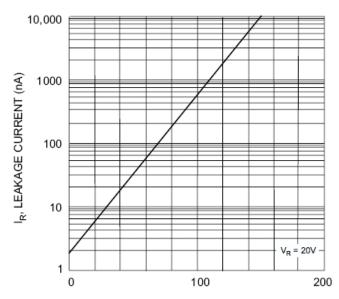
Characteristic		Symbol	1N4148WS	Unit
Forward Voltage Drop	@ IF = 10mA	VFM	1.0	٧
Peak Reverse Leakage Current	@ VR = 75V	IRM	2.5	μA
Junction Capacitance (VR = 0V DC, f = 1.0MHz)		Cj	2.0	pF
Reverse Recovery Time (Note 2)		trr	4.0	nS

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

2. Measured with IF = IR = 10mA, IRR = 0.1 x IR, RL = 100  $\Omega$ .



 $V_{\rm F}$ , INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 1 Forward Characteristics



 $\label{eq:total_total_total} \textbf{T}_{j}, \text{JUNCTION TEMPERATURE (°C)} \\ \text{Fig. 2 Leakage Current vs Junction Temperature} \\$ 



# 1N4148WS SURFACE MOUNT FAST SWITCHING DIODE

#### Technical Data Data Sheet N0572, Rev. A

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