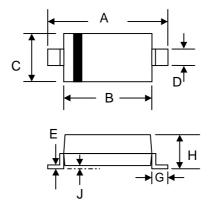


# 1N4150W / 1N4151W

## SURFACE MOUNT FAST SWITCHING DIODE

## **Features**

- 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



SOD-123			
Dim	Min	Max	
Α	3.6	3.9	
В	2.5	2.8	
С	1.4	1.8	
D	0.5	0.7	
Е	_	0.2	
G	0.4	_	
Н	0.95	1.35	
J	_	0.12	
All Dimensions in mm			

## **Mechanical Data**

Case: SOD-123, Molded Plastic

Terminals: Plated Leads Solderable per

MIL-STD-202, Method 208

Polarity: Cathode Band

Weight: 0.01 grams (approx.)

Marking: 1N4150W A4

1N4151W A5

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

Characteristic	Symbol	1N4150W	1N4151W	Unit
Non-Repetitive Peak Reverse Voltage	VRM	50	75	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	50		V
RMS Reverse Voltage	VR(RMS)	35		V
Forward Continuous Current (Note 1)	IFМ	400	300	mA
Average Rectified Output Current (Note 1)	lo	200	150	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0µs @ t = 1.0ps	IFSM	4.0 1.0	2.0 0.5	А
Power Dissipation (Note 1)	Pd	410	500	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1	)	300		K/W
Operating and Storage Temperature Range	Tj, Tstg	-65 to +150		°C

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

Characteristic		Symbol	1N4150W	1N4151W	Unit
Forward Voltage Drop (Note 4)		VFM	1.	0	V
Peak Reverse Leakage Current @ VR	e = 50V	IRM	100	50	nA
Typical Junction Capacitance (VR = 0V DC, f = 1.0MHz)		Cj	2.5	2.0	pF
Reverse Recovery Time (Note 2, 3)		trr	4.0	2.0	nS

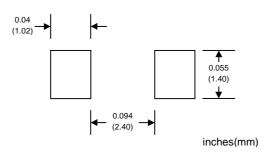
Note: 1. Valid provided that terminals are kept at ambient temperature.

- 2. 1N4150W: Measured with IF = IR = 200mA, IRR = 0.1 x IR, RL =  $100\,\Omega$  .
- 3. 1N4151W: Measured with IF = IR = 10mA, IRR = 1.0 x IR, RL = 100  $\Omega$ .
- 4. 1N4150W: Measured with IF = 200mA. 1N4151W: Measured with IF = 10mA

#### **ORDERING INFORMATION**

Product No.◆	Package Type	Shipping Quantity
1N4150W-T1	SOD-123	3000/Tape & Reel
1N4150W-T3	SOD-123	10000/Tape & Reel
1N4151W-T1	SOD-123	3000/Tape & Reel
1N4151W-T3	SOD-123	10000/Tape & Reel

#### RECOMMENDED FOOTPRINT



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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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We power your everyday.

Products listed in **bold** are WTE **Preferred** devices.

T1 suffix refers to a 7" reel. T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.