

## 1N4148W FAST SWITCHING DIODE



### Features

- Small Package
- Low Reverse Current
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- This is a Halogen Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

### Circuit Diagram



### 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)

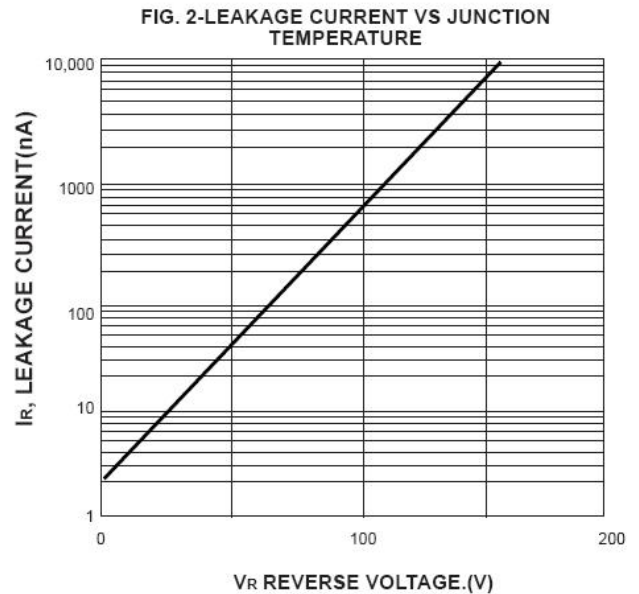
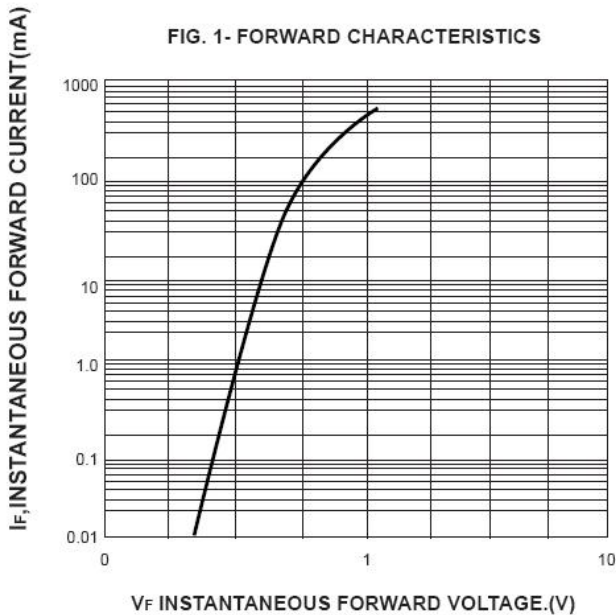
### Maximum Ratings @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	Limits	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	75	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	53	V
Forward Continuous Current	I <sub>F</sub>	300	mA
Average Rectified Output Current	I <sub>O</sub>	150	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	2.0	A
Power Dissipation	P <sub>D</sub>	400	mW
Typical Thermal Resistance, Junction to Ambient	R <sub>θJA</sub>	315	°C/W
Junction Temperature Range	T <sub>J</sub>	-55 to +125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

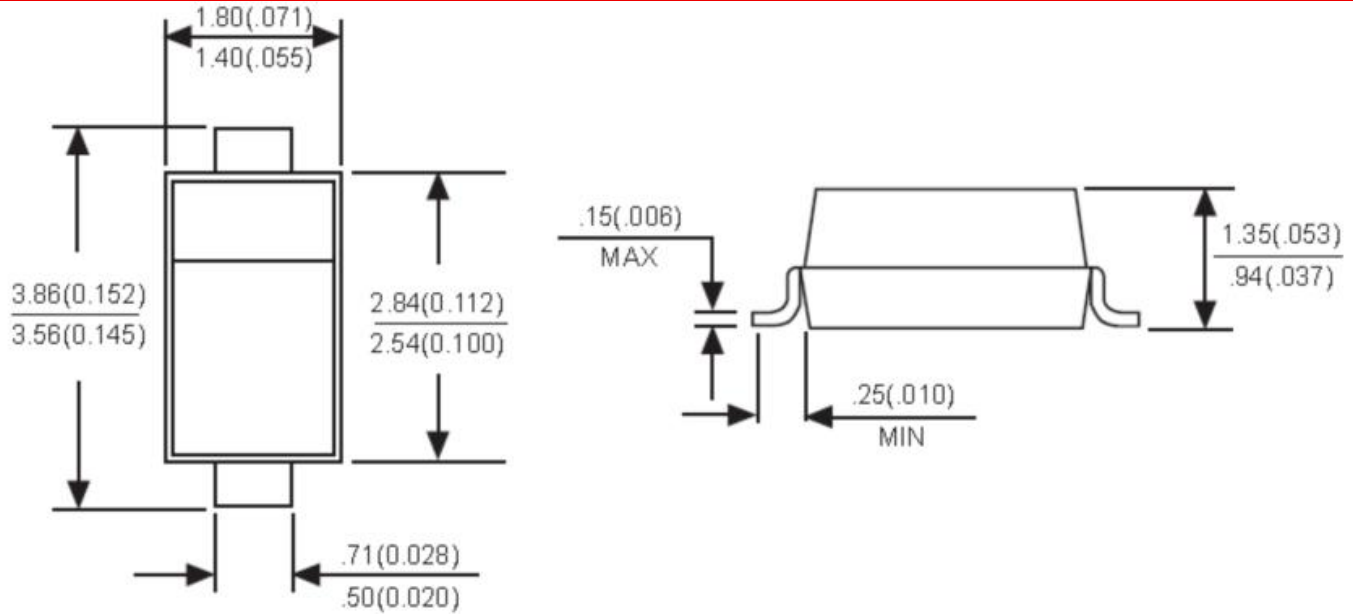
**Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified**

Characteristic	Symbol	Min	Max	Units	Test Condition
Forward Voltage	V <sub>FM</sub>	-	0.715 0.855 1.00 1.25	V	@I <sub>F</sub> =1mA @I <sub>F</sub> =10mA @I <sub>F</sub> =50mA @I <sub>F</sub> =150mA
Reverse Leakage Current	I <sub>RM</sub>	-	2.5 25	uA nA	@V <sub>R</sub> =75V @V <sub>R</sub> =20V
Capacitance	C <sub>T</sub>	-	2	pF	V <sub>R</sub> =0V, f=1.0MHz
Reverse Recovery Time	t <sub>rr</sub>	-	4	ns	I <sub>F</sub> =I <sub>R</sub> =10mA I <sub>rr</sub> =0.1X I <sub>R</sub> , R <sub>L</sub> =100Ω

**Ratings and Characteristics Curves**



**Mechanical Dimensions SOD-123(Millimeters/Inches)**

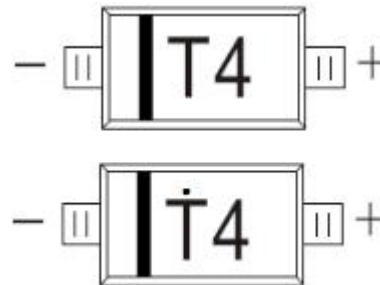


**Ordering Information**

Device	Package	Shipping
1N4148W	SOD-123	3000pcs / reel

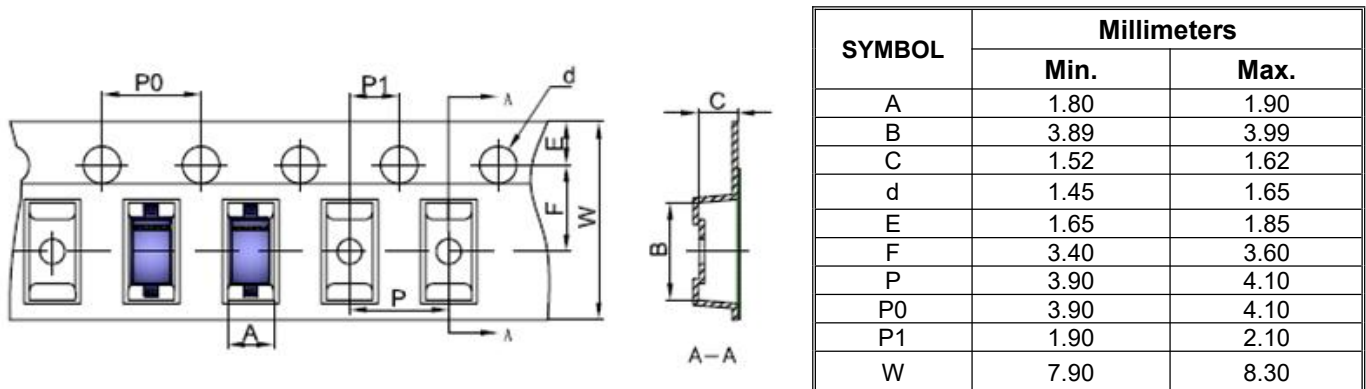
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

**Marking Diagram**



The marking bar indicates the cathode  
Solid dot = Green molding compound device, if none, the normal device.

**Carrier Tape Specification SOD-123**



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