



# 1N4148W

## SURFACE MOUNT SWITCHING DIODES

**VOLTAGE** 100 Volts **POWER** 410mWatts

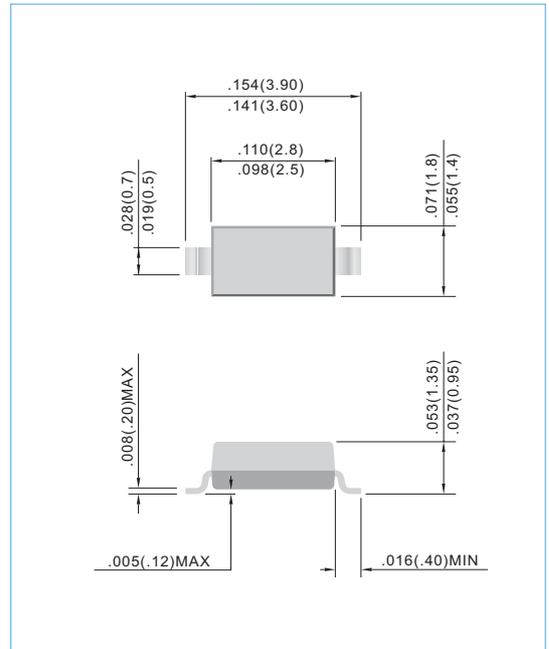
**SOD-123** Unit: inch (mm)

### FEATURES

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion.
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

Case: SOD-123 plastic case.  
 Terminals : Solderable per MIL-STD-750, Method 2026  
 Standard packaging: 8mm tape  
 Weight: approximately 0.01 gram  
 Marking Code: A2



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>J</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	1N4148W	UNITS
Reverse Voltage	V <sub>R</sub>	75	V
Peak Reverse Voltage	V <sub>RM</sub>	100	V
RMS Voltage	V <sub>RMS</sub>	50	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	75	V
Maximum Average Forward Current at T <sub>A</sub> =25°C	I <sub>AV</sub>	150	mA
Peak Forward Surge Current, 1.0µs	I <sub>FSM</sub>	4	A
Power Dissipation Derate Above 25°C	P <sub>TOT</sub>	410	mW
Maximum Forward Voltage	V <sub>F</sub>	0.715@0.001A 0.855@0.01A 1.0@0.05A 1.25@0.15A	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T <sub>J</sub> = 25°C	I <sub>R</sub>	0.025@20V 2.5@75V	µA
Junction Capacitance( Notes1)	C <sub>J</sub>	1.5	pF
Maximum Reverse Recovery (Notes2)	T <sub>RR</sub>	4.0	ns
Typical Thermal Resistance	R <sub>θJA</sub>	450	°C / W
Operating and Storage Temperature Range	T <sub>J</sub>	-55 to +150	°C

**NOTE:**

1. C<sub>J</sub> at V<sub>R</sub>=0, f=1MHZ
- 2.From I<sub>F</sub>=10mA to I<sub>R</sub>=1mA, V<sub>R</sub>=6Volts, R<sub>L</sub>=100Ω



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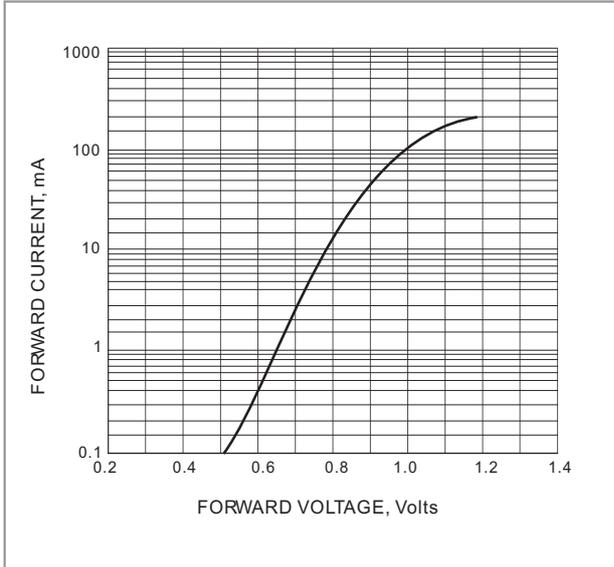


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

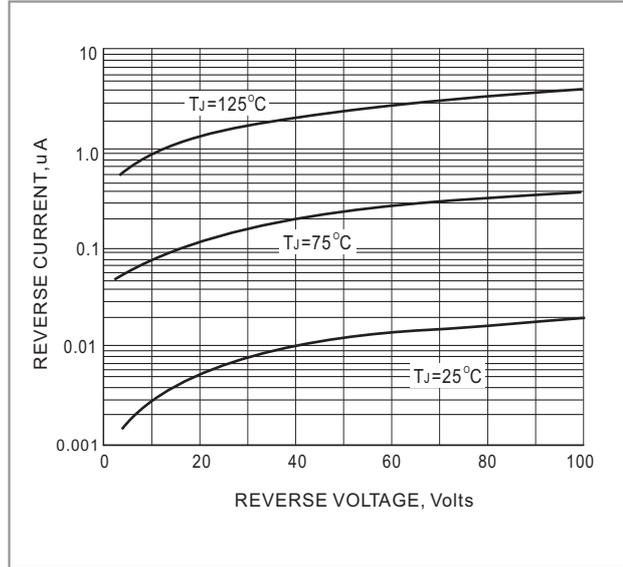


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

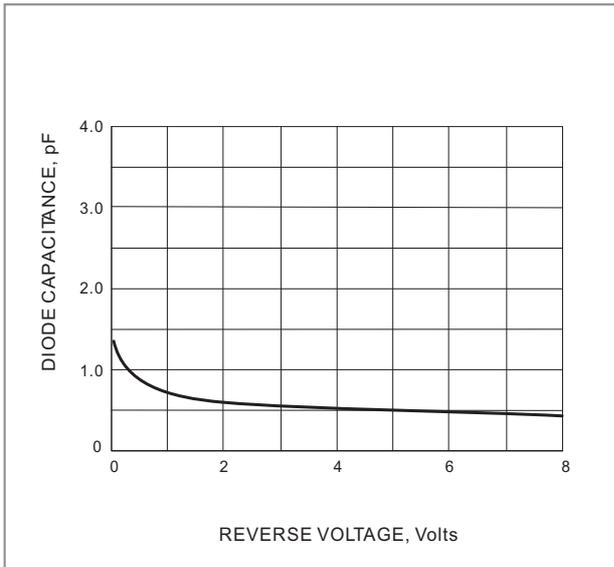


FIG. 3 TYPICAL JUNCTION CAPACITANCE

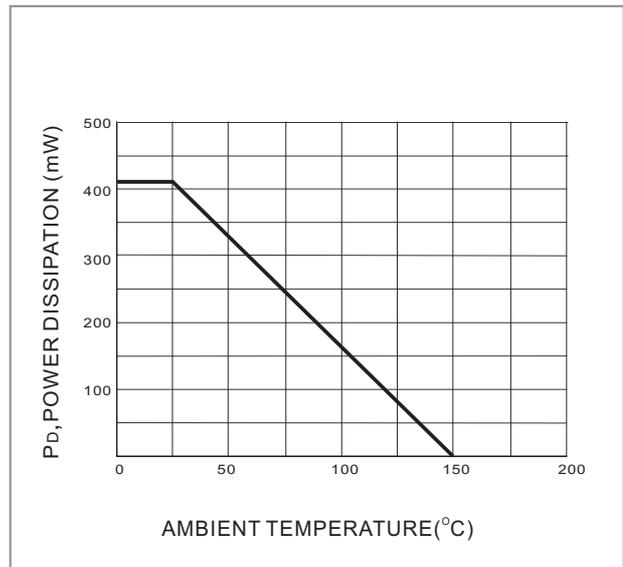
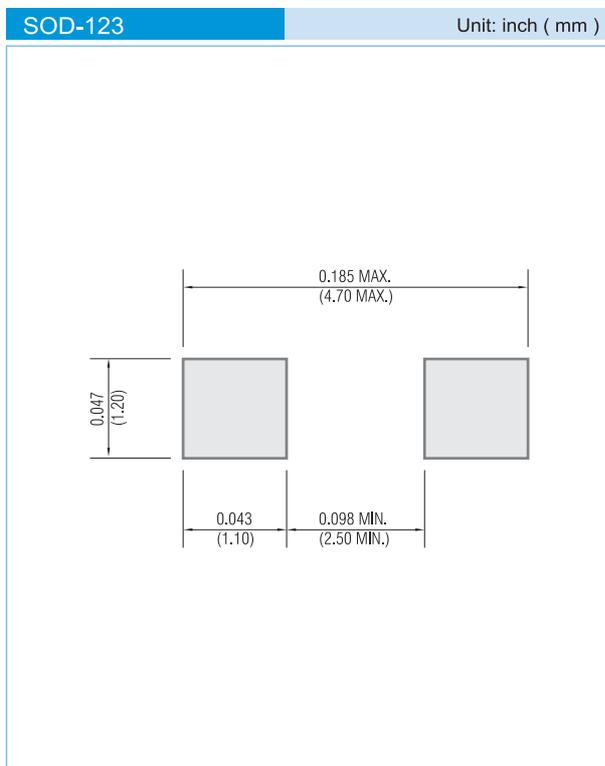


FIG. 4 POWER DERATING CURVE



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information
  - T/R - 10K per 13" plastic Reel
  - T/R - 3K per 7" plastic Reel

## LEGAL STATEMENT

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