



# 1N4448W

## SURFACE MOUNT SWITCHING DIODES

**VOLTAGE** 100 Volts **POWER** 500mWatts

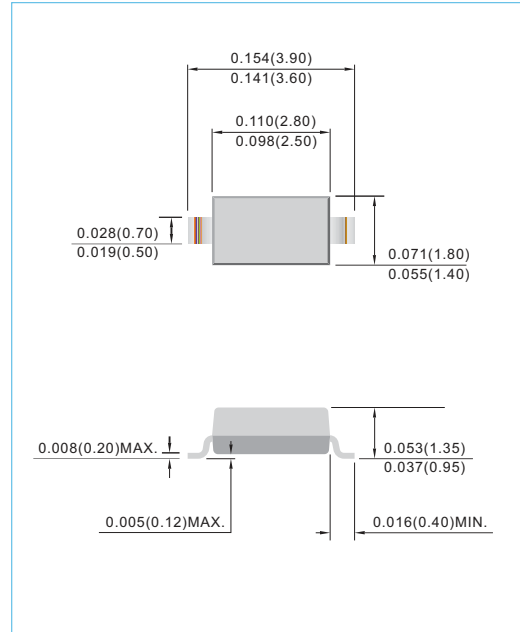
**SOD-123** Unit : inch(mm)

### FEATURES

- Fast switching Speed
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion
- Lead free in comply with EU RoHS 2011/65/EU directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: SOD-123 plastic case.
- Terminals : Solderable per MIL-STD-750, Method 2026
- Standard packaging: 8mm tape
- Weight: approximately 0.0004 ounces, 0.01grams
- Marking Code: A3



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

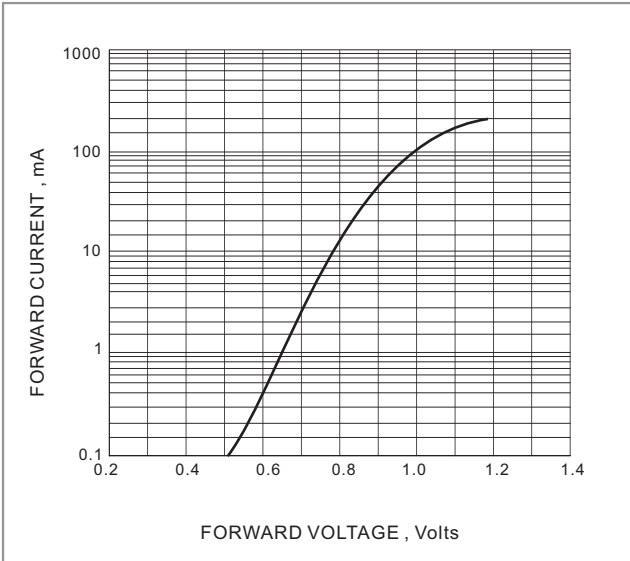
PARAMETER	SYMBOL	1N4448W	UNITS
Reverse Voltage	V <sub>R</sub>	75	V
Peak Reverse Voltage	V <sub>RM</sub>	100	V
RMS Voltage	V <sub>RMS</sub>	50	V
Forward Continuous	I <sub>FM</sub>	500	mA
Maximum DC Blocking Voltage	V <sub>DC</sub>	75	V
Maximum Average Forward Current at T <sub>A</sub> =25°C	I <sub>F(AV)</sub>	150	mA
Peak Forward Surge Current, 1.0us	I <sub>FSM</sub>	4	A
Power Dissipation Derate Above 25°C	P <sub>TOT</sub>	500	mW
Maximum Forward Voltage	V <sub>F</sub>	0.72 / 0.005A 1.0 / 0.1A	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T <sub>J</sub> =25°C	I <sub>R</sub>	2.5@75V	μA
Junction Capacitance( Note1)	C <sub>J</sub>	4.0	pF
Maximum Reverse Recovery (Note2)	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> , T <sub>STG</sub>	-55 to +150	°C

**NOTE:**

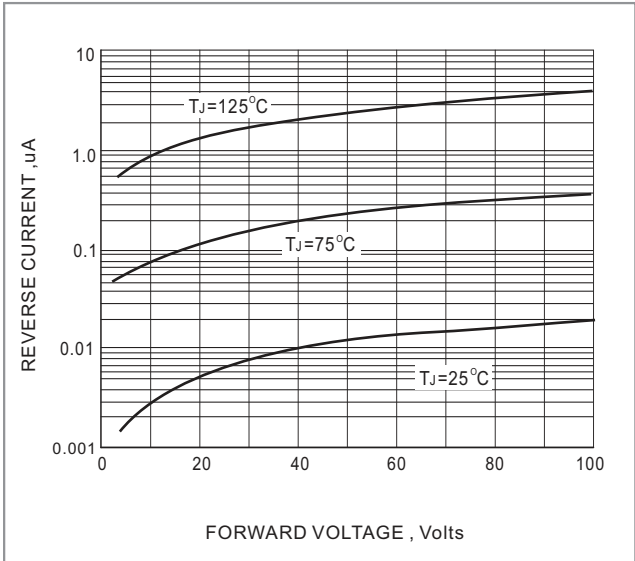
1. C<sub>J</sub> at V<sub>R</sub>=0, f=1MHZ
2. From I<sub>F</sub>=10mA to I<sub>R</sub>=1mA, V<sub>R</sub>=6Volts, R<sub>L</sub>=100Ω



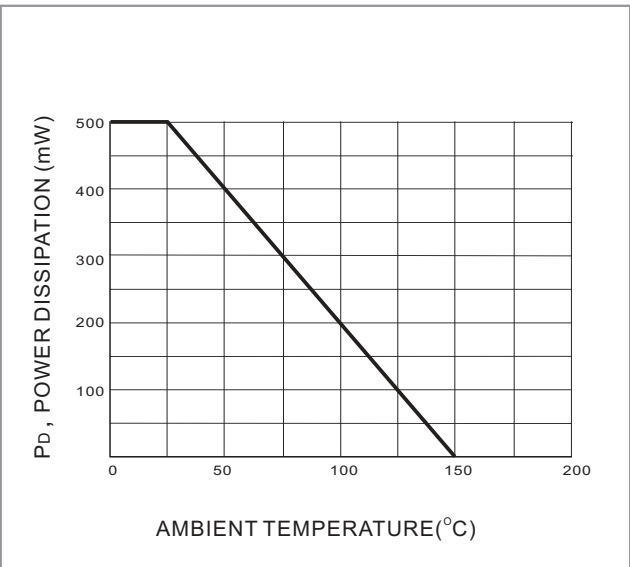
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**FIG. 1-TYPICAL FORWARD CHARACTERISTIC**



**FIG. 2-TYPICAL REVERSE CHARACTERISTICS**

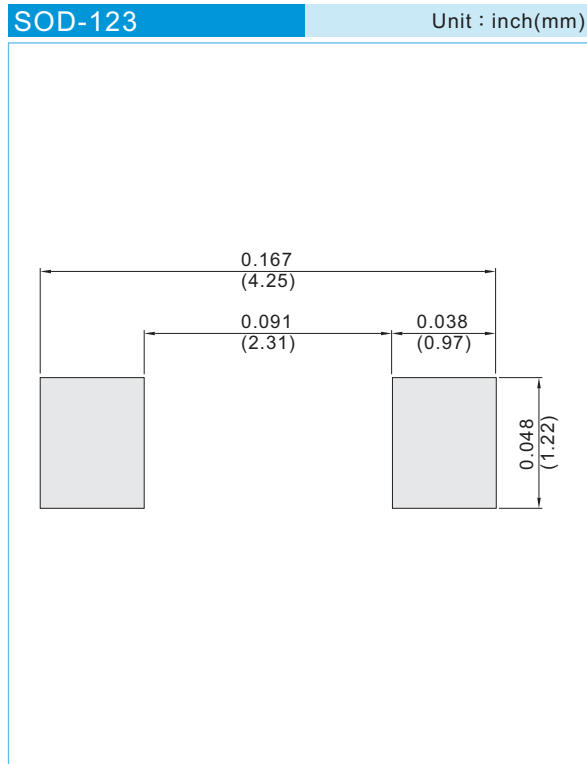


**FIG. 3 POWER DERATING CURVE**



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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



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## Part No\_packing code\_Version

1N4448W\_R1\_00001

1N4448W\_R2\_00001

For example :

**RB500V-40** **R2** **00001**

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			



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