



# 1N4148W

## SURFACE MOUNT SWITCHING DIODES

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

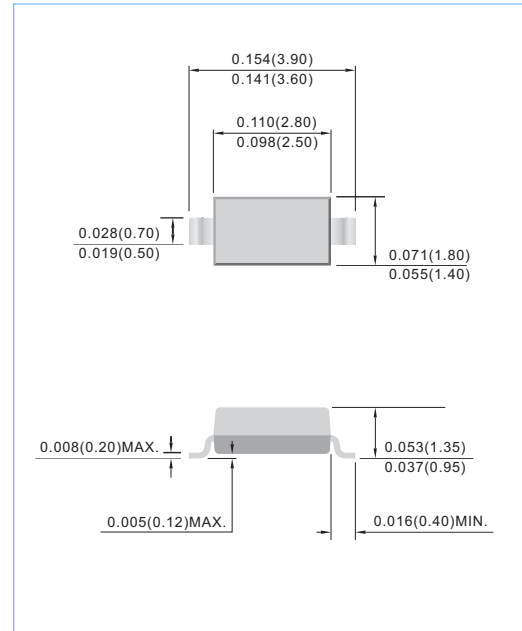
**SOD-123** Unit : inch(mm)

### FEATURES

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion.
- Lead free in comply with EU RoHS 2002/95/EC 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, 0.01 grams  
 Marking Code: A2



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

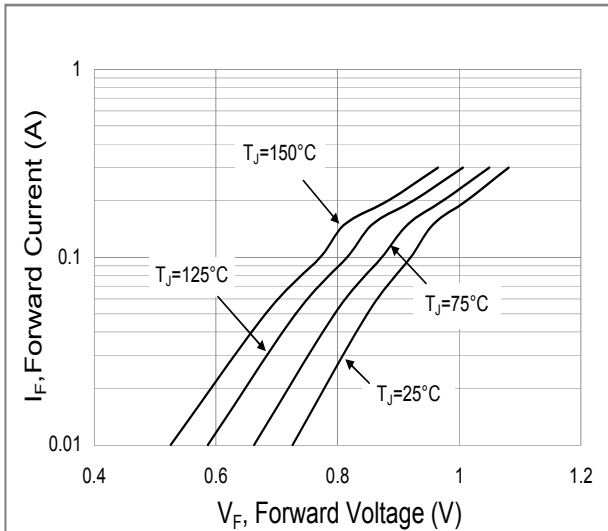
PARAMETER	SYMBOL	1N4148W	UNITS
Reverse Voltage	V <sub>R</sub>	75	V
Peak Reverse Voltage	V <sub>RM</sub>	100	V
RMS Voltage	V <sub>RMS</sub>	50	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	75	V
Maximum Average Forward Current at T <sub>A</sub> =25°C	I <sub>AV</sub>	150	mA
Peak Forward Surge Current, 1.0μs	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:**

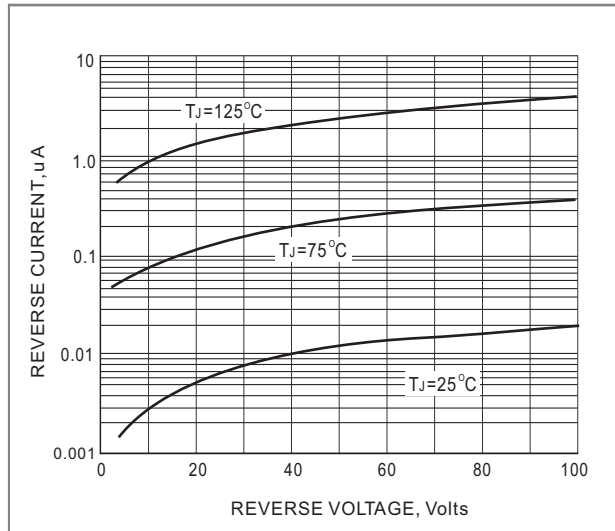
1. C<sub>J</sub> at V<sub>R</sub>=0, f=1MHZ
- 2.From I<sub>F</sub>=10mA to I<sub>R</sub>=1mA, V<sub>R</sub>=6Volts, R<sub>L</sub>=100Ω



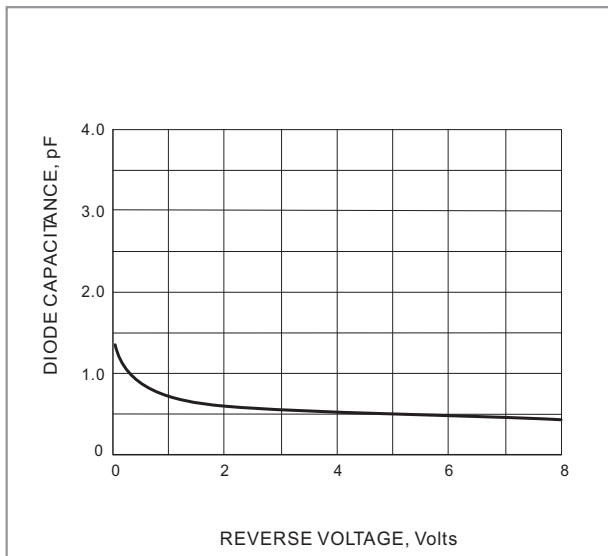
**1N4148W**



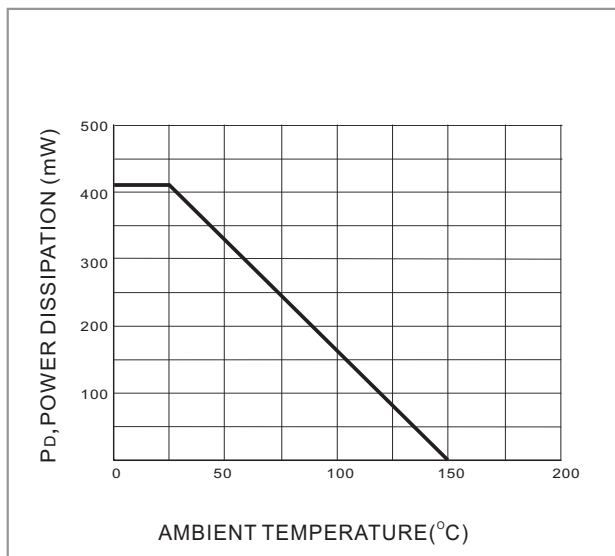
**Fig. % Typical Forward Characteristics**



**FIG. 2 TYPICAL REVERSE CHARACTERISTICS**



**FIG. 3 TYPICAL JUNCTION CAPACITANCE**

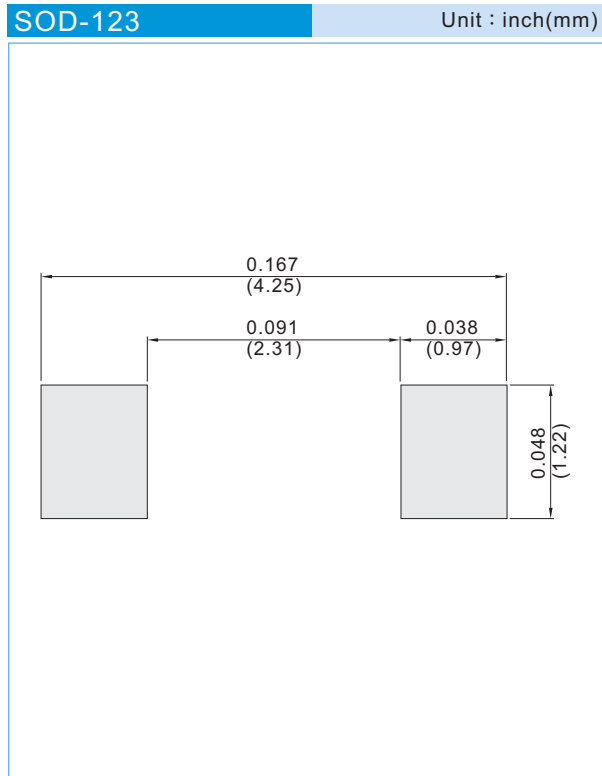


**FIG. ( POWER DERATING CURVE**



# 1N4148W

## MOUNTING PAD LAYOUT



## ORDER INFORMATION

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

## LEGAL STATEMENT

### Copyright PanJit International, Inc 2012

The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.

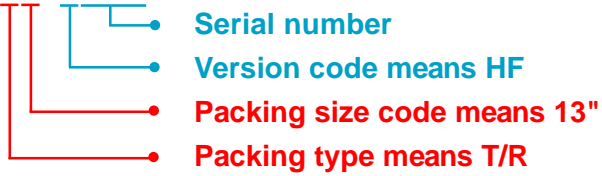


# 1N4148W

For example :

**RB500V-40\_R2\_00001**

Part No.



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
T/B	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
T/R	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
B/P	<b>B</b>	13"	<b>2</b>			
T/P	<b>T</b>	26mm	<b>X</b>			
TRR	<b>S</b>	52mm	<b>Y</b>			
TRL	<b>L</b>	PBCU	<b>U</b>			
FORMING	<b>F</b>	PBCD	<b>D</b>			

**Part No\_packing code\_Version**

1N4148W\_R1\_00001

1N4148W\_R2\_00001