



# 1N4148WS SERIES

## SURFACE MOUNT SWITCHING DIODES

**VOLTAGE** 100 Volts **POWER** 250mWatts

**SOD-323** Unit : inch(mm)

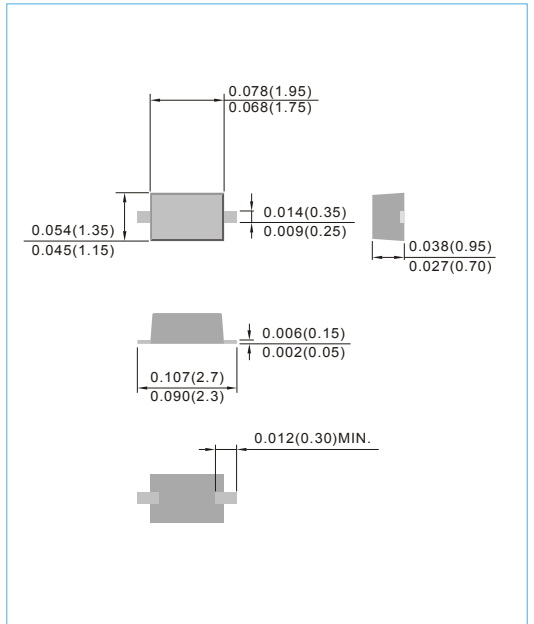
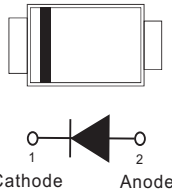
### FEATURES

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance

~MO:^^} A [ |aa \* &{ [ ] [ ^ } aa A ^! AOOÍ FG JÁcaZP a{ \* ^} A ^AD

### MECHANICAL DATA

- Case: SOD-323, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0001 ounces, 0.0041 grams
- Polarity : Color band cathode



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. For capacitive load, derate current by 20%.

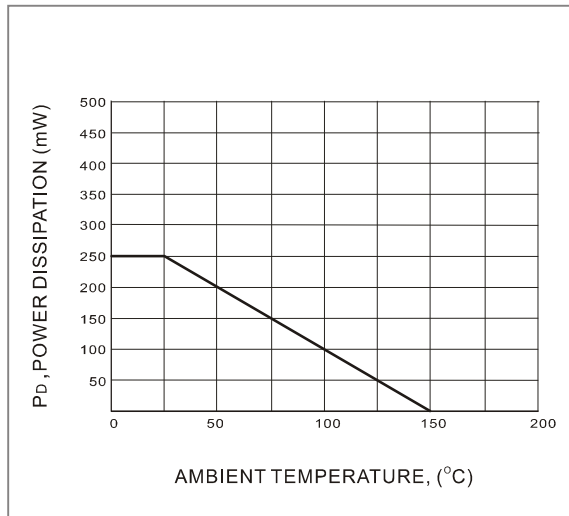
PARAMETER	SYMBOL	1N4148WS	1N4448WS	BAV16WS	UNITS
Marking Code	-	A2	A3	A6	-
Reverse Voltage	$V_R$	75			V
Peak Reverse Voltage	$V_{RM}$	100			V
RMS Voltage	$V_{RMS}$	50			V
Maximum Average Forward Current at $T_A=25^\circ\text{C}$	$I_{F(AV)}$	200			mA
Peak Forward Surge Current, 0.001ms	$I_{FSM}$	4			A
Power Dissipation Derate Above 25°C	$P_D$	250			mW
Maximum Forward Voltage	$V_F$	0.715 @ 0.001A 0.855 @ 0.01A 1.0 @ 0.05A 1.25 @ 0.15A	0.72 @ 0.005A 1.0 @ 0.1A	0.855 @ 0.01A	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.025 @ 20V 2.5 @ 75V	2.5 @ 75V	1.0 @ 75V	$\mu\text{A}$
Junction Capacitance ( Notes1)	$C_J$	1.5	4.0	2.0	pF
Maximum Reverse Recovery Time (Notes2)	$t_{rr}$	4	4	6	ns
Typical Thermal Resistance	$R_{\theta JA}$	500			$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150			$^\circ\text{C}$

Notes :

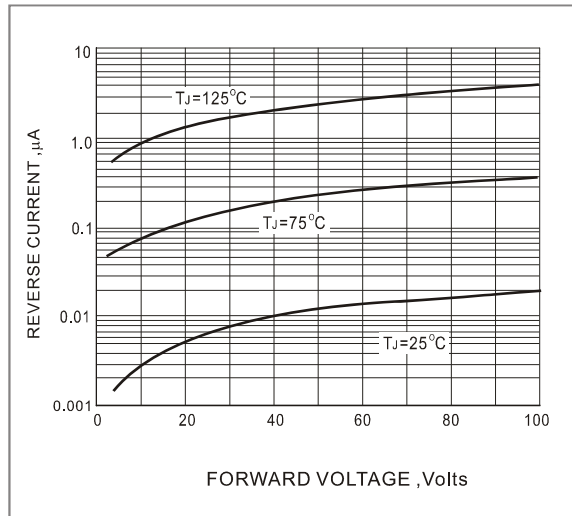
1.  $C_J$  at  $V_R=0$ ,  $f=1\text{MHz}$
2. From  $I_F=10\text{mA}$  to  $I_R=1\text{mA}$ ,  $V_R=6\text{Volts}$ ,  $R_L=100\Omega$



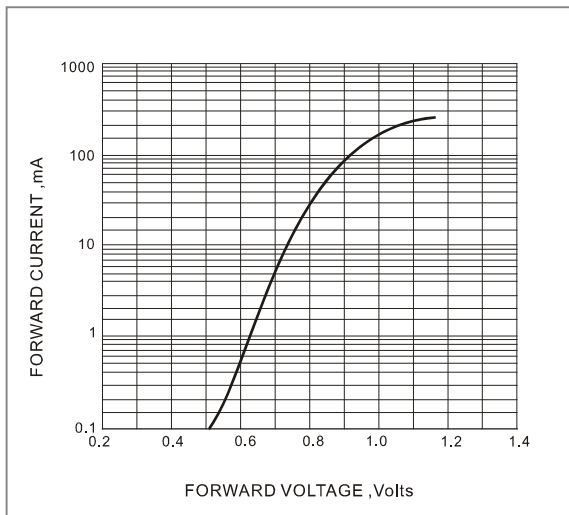
# 1N4148WS SERIES



**FIG. 1 POWER DERATING CURVE**



**FIG. 2-TYPICAL REVERSE CHARACTERISTICS**

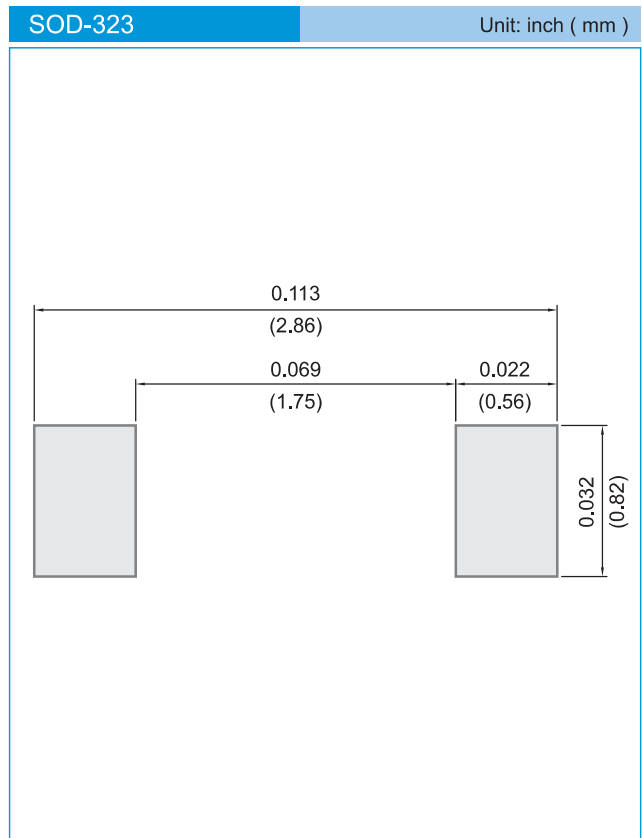


**FIG. 3-TYPICAL FORWARD CHARACTERISTIC**



# 1N4148WS SERIES

## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information
  - T/R - 12K per 13" plastic Reel
  - T/R - 5K per 7" plastic Reel

## LEGAL STATEMENT

### Copyright PanJit International, Inc 2012

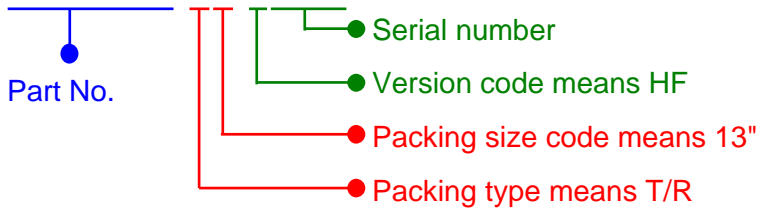
The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products 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.



## 1N4148WS SERIES

For example :

**RB500V-40\_R2\_00001**



**Part No\_packing code\_Version**

**1N4148WS\_R1\_00001**

**1N4148WS\_R2\_00001**

Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	<b>1<sup>st</sup> Code</b>	Packing size code	<b>2<sup>nd</sup> Code</b>	HF or RoHS	<b>1<sup>st</sup> Code</b>	<b>2<sup>nd</sup>~5<sup>th</sup> Code</b>
T/B	<b>A</b>	N/A	<b>0</b>	HF	<b>0</b>	<b>serial number</b>
T/R	<b>R</b>	7"	<b>1</b>	RoHS	<b>1</b>	<b>serial number</b>
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>			