



# 1N4148WS SERIES

## SURFACE MOUNT SWITCHING DIODES

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

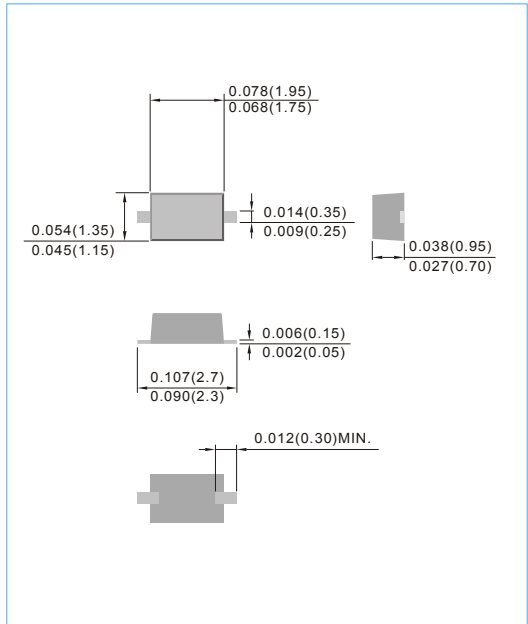
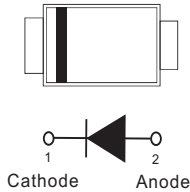
**SOD-323** Unit : inch(mm)

### FEATURES

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

### 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%.

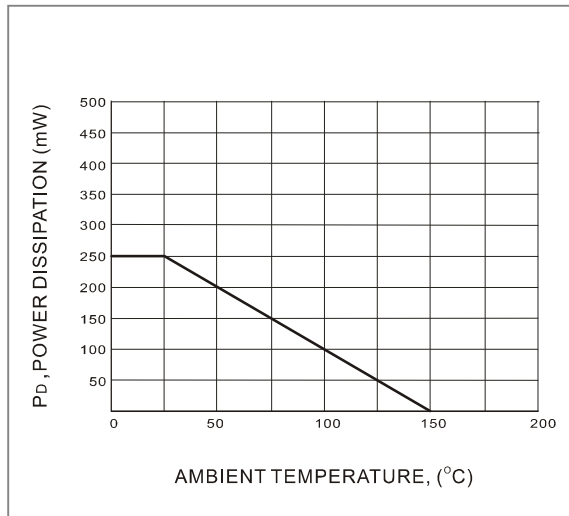
PARAMETER	SYMBOL	1N4148WS	1N4448WS	BAV16WS	UNITS
Marking Code	-	A2	A3	A6	-
Reverse Voltage	$V_R$	75			V
Peak Reverse Voltage	$V_{RM}$	100			V
RMS Voltage	$V_{RMS}$	50			V
Maximum Average Forward Current at $T_A=25^\circ\text{C}$	$I_{F(AV)}$	200			mA
Peak Forward Surge Current, 0.001ms	$I_{FSM}$	4			A
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 :

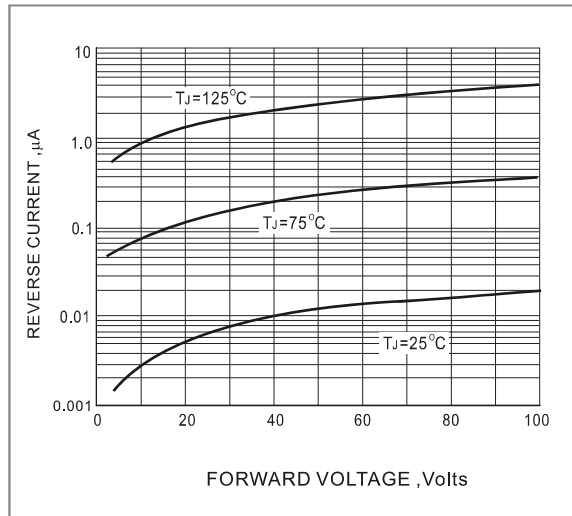
1.  $C_J$  at  $V_R=0$ ,  $f=1\text{MHz}$
2. From  $I_F=10\text{mA}$  to  $I_R=1\text{mA}$ ,  $V_R=6\text{Volts}$ ,  $R_L=100\Omega$



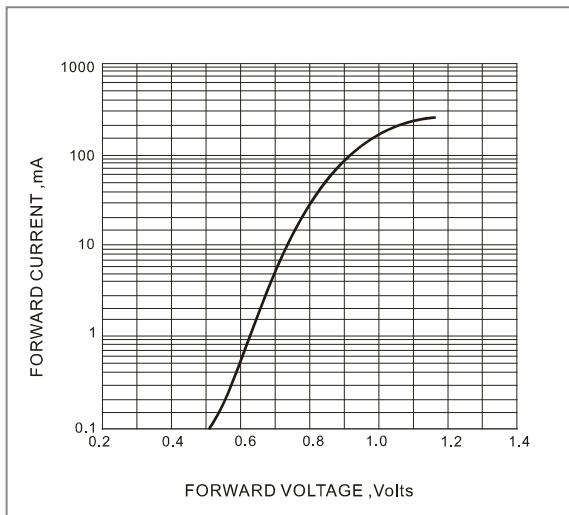
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**FIG. 1 POWER DERATING CURVE**



**FIG. 2-TYPICAL REVERSE CHARACTERISTICS**

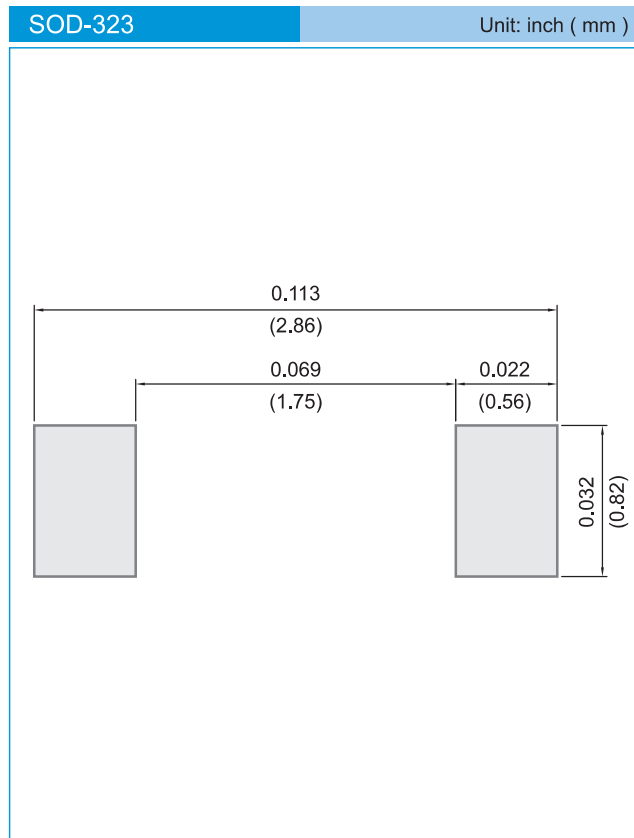


**FIG. 3-TYPICAL FORWARD CHARACTERISTIC**



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### 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

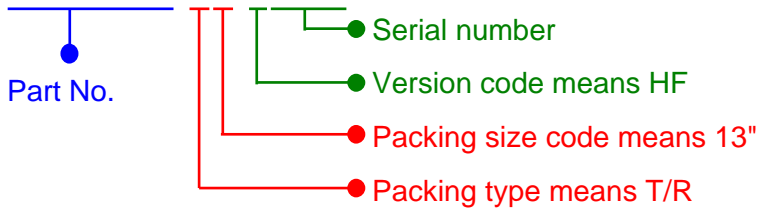
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## 1N4148WS SERIES

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>			