



**THE DATASHEET OF  
1N4148WS\_R1\_00001**





# 1N4148WS

## SURFACE MOUNT SWITCHING DIODES

**Voltage**

**100 V**

**Power**

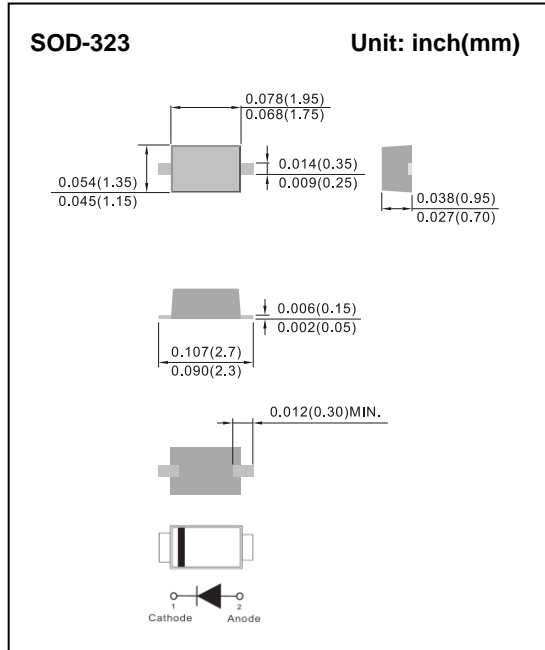
**250mW**

### Features

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### Mechanical Data

- Case: SOD-323, plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Approx. Weight: 0.00014 ounces, 0.0041 grams



### Maximum Ratings ( $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Marking code	-	A2	-
Reverse voltage	$V_R$	75	V
Maximum dc blocking voltage	$V_{DC}$	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	$I_{FSM}$	0.001ms	4
		10ms	1.5
		1s	0.5
Power dissipation derate above $25^\circ\text{C}$	$P_D$	250	mW
Maximum forward voltage	$V_F$	0.715@1mA	V
		0.855@10mA	
		1@50mA	
		1.25@150mA	
Maximum dc reverse current at rated dc blocking voltage	$I_R$	0.025@20V	$\mu\text{A}$
		2.5@75V	
Junction capacitance Measured at 1MHz and applied $V_R=0\text{V}$	$C_J$	1.5	pF
Maximum reverse recovery time	(Note 3) $T_{RR}$	4	ns
Typical thermal resistance	(Note 1) $R_{\theta JA}$	500	$^\circ\text{C/W}$
	(Note 2) $R_{\theta JA}$	650	
	(Note 4) $R_{\theta JC}$	280	
	(Note 4) $R_{\theta JL}$	400	
Operating and storage temperature range	$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

Note : 1. Mounted on a FR4, single-sided copper, with 50 x 15mm PCB.

2. Mounted on a FR4, single-sided copper, with mini pad.

3. From  $I_F=10\text{mA}$  to  $I_R=1\text{mA}$ ,  $V_R=6\text{Volts}$ ,  $R_L=100\Omega$ .

4. Mounted on a FR-4 PCB, single-sided copper, mini pad, with  $100\text{cm}^2$  copper pad area.



# 1N4148WS

## TYPICAL CHARACTERISTIC CURVES

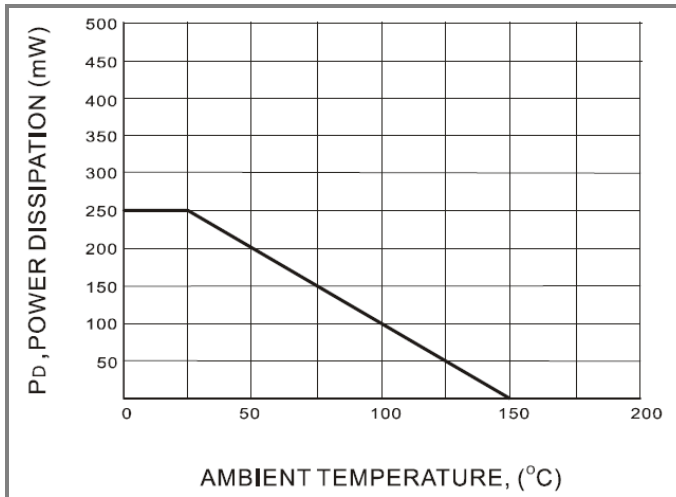


Fig.1 Power Derating Curve

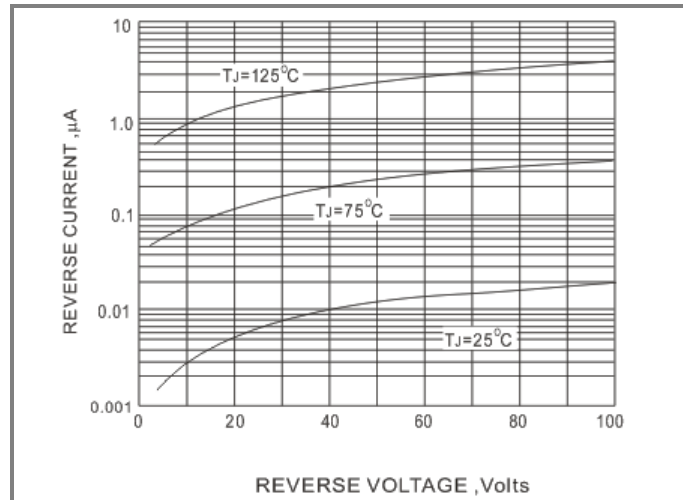


Fig.2 Typical Reverse Characteristics

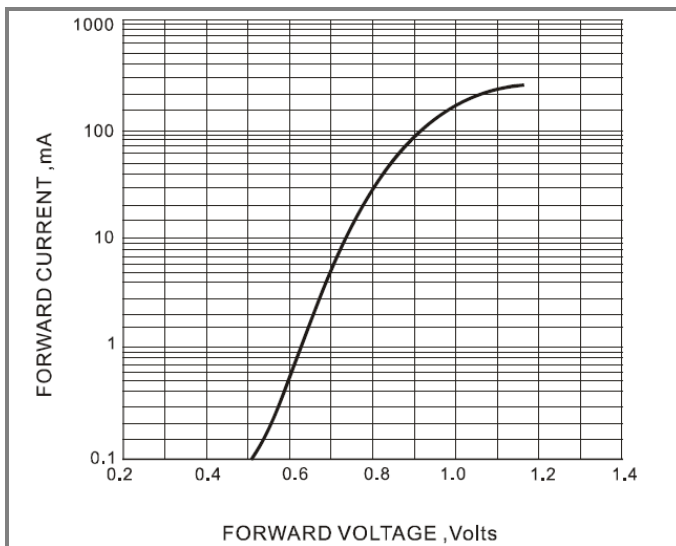


Fig.3 Typical Forward Characteristics

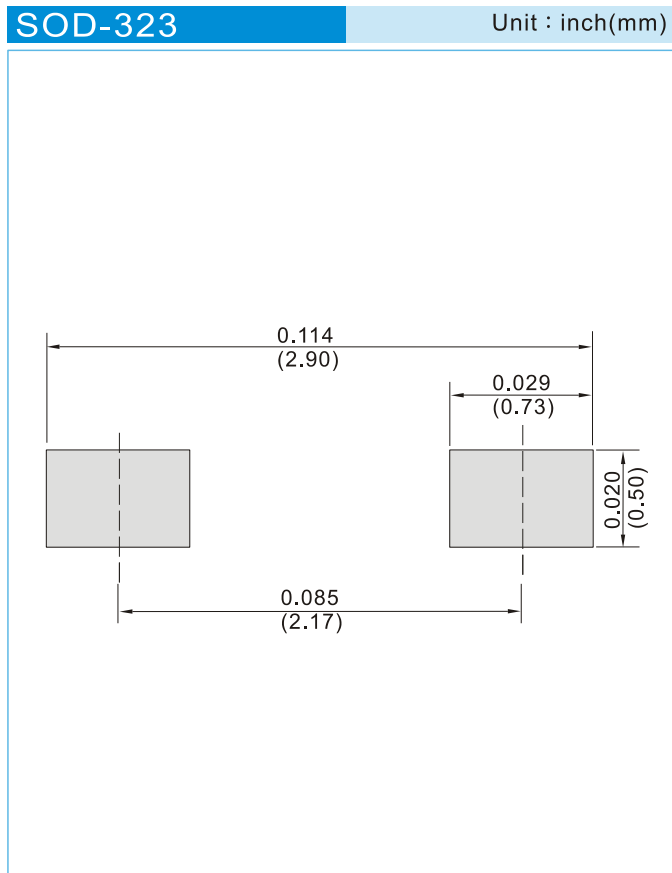


# 1N4148WS

## Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
1N4148WS_R1_00001	SOD-323	5K pcs / 7" reel	A2	Halogen free
1N4148WS_R2_00001	SOD-323	12K pcs / 13" reel	A2	Halogen free

## Mounting Pad Layout






## 1N4148WS

### Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.







## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View 1N4148WS\\_R1\\_00001 on WIN SOURCE](#)

 [Panjit Information](#)

## Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management