



# 1N4148WS-AU~BAV16WS-AU

## SURFACE MOUNT SWITCHING DIODES

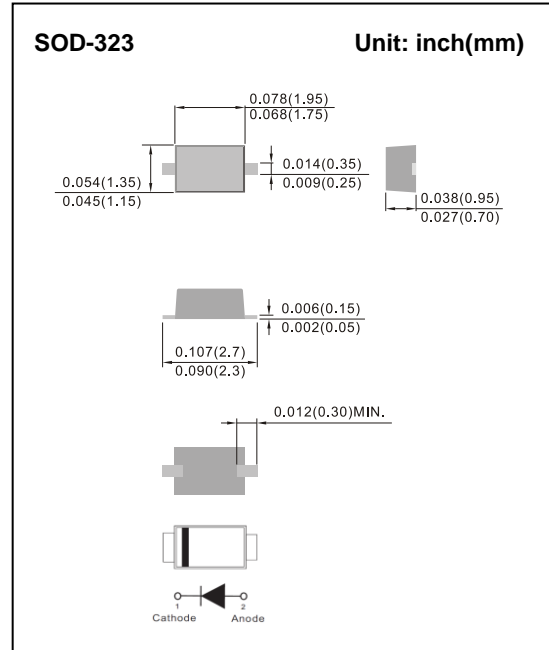
**Voltage** 100 V **Power** 250mW

### Features

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance
- AEC-Q101 qualified
- 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	1N4148WS-AU	1N4448WS-AU	BAV16WS-AU	UNIT
Marking code	-	A2	A3	A6	-
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 10ms 1s	4 1.5 0.5		A
Power dissipation derate above $25^\circ\text{C}$	$P_D$	250			mW
Maximum forward voltage	$V_F$	0.715@1mA 0.855@10mA 1@50mA 1.25@150mA	0.72@5mA 1@100mA	0.715@1mA 0.855@10mA 1@50mA	V
Maximum dc reverse current at rated dc blocking voltage	$I_R$	0.025@20V 2.5@75V	2.5@75V	1@75V	$\mu\text{A}$
Junction capacitance Measured at 1MHz and applied $V_R=0\text{V}$	$C_J$	1.5	4	2	pF
Maximum reverse recovery time	(Note 3) $T_{RR}$	4	4	6	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-AU~BAV16WS-AU

## TYPICAL CHARACTERISTIC CURVES

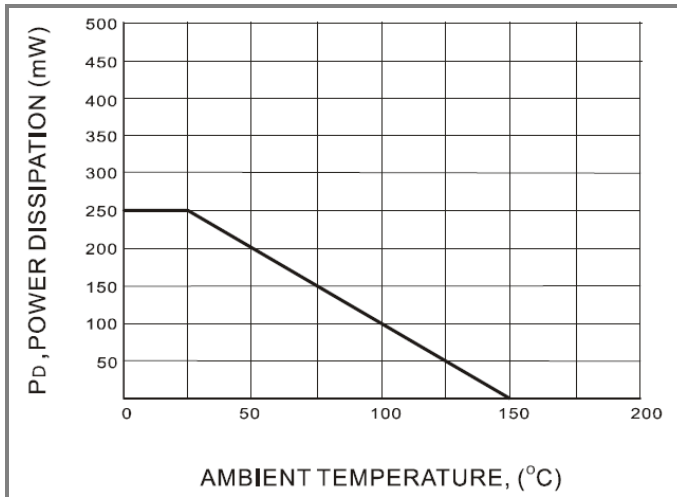


Fig.1 Power Derating Curve

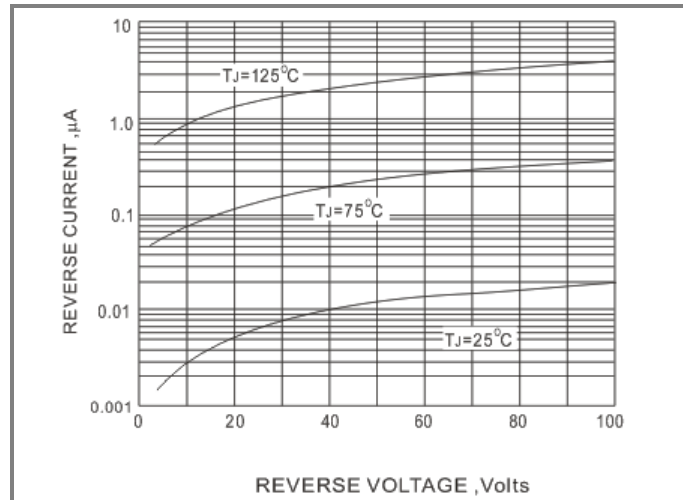


Fig.2 Typical Reverse Characteristics

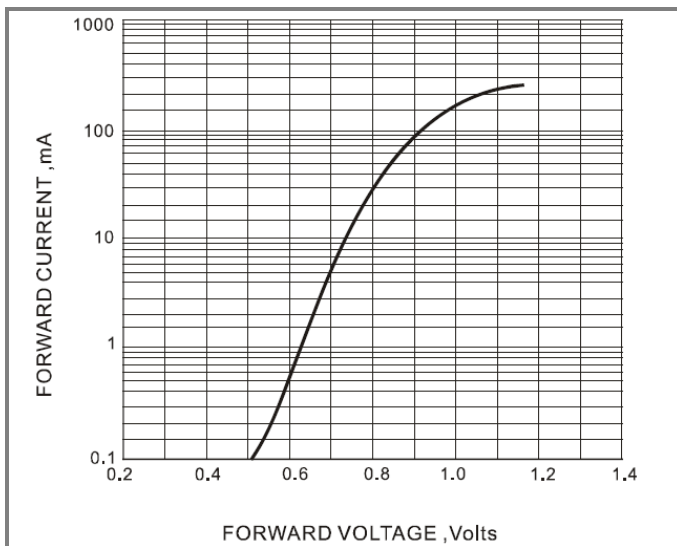


Fig.3 Typical forward Characteristics

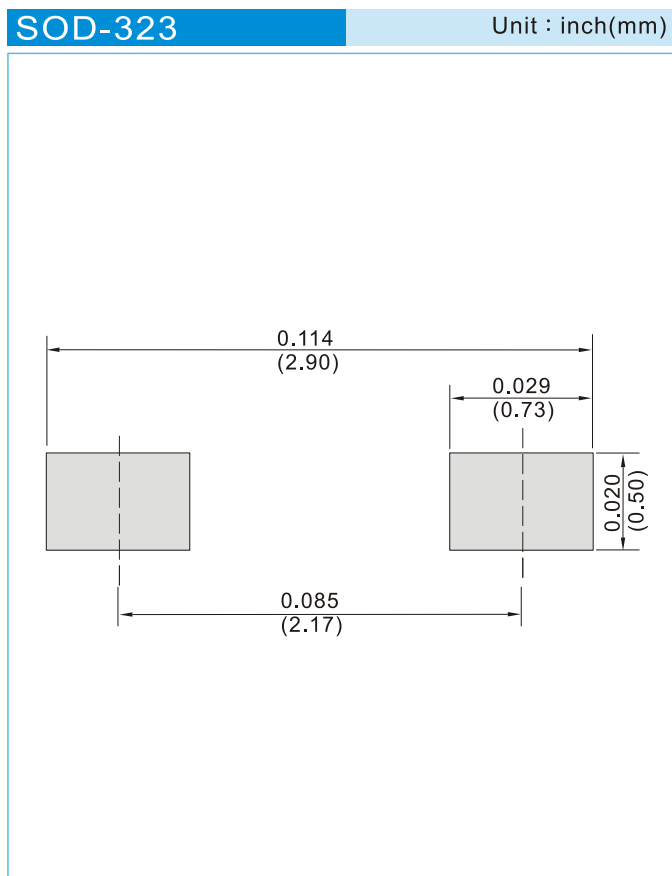


# 1N4148WS-AU~BAV16WS-AU

## Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
1N4148WS-AU_R1_000A1	SOD-323	5K pcs / 7" reel	A2	Halogen free
1N4148WS-AU_R2_000A1	SOD-323	12K pcs / 13" reel	A2	Halogen free

## Mounting Pad Layout





## 1N4148WS-AU~BAV16WS-AU

### 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 relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, 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.

单击下面可查看定价，库存，交付和生命周期等信息

[>>Panjit\(强茂\)](#)