

# 1N4148WSG

## Surface Mount Switching Diodes

**Voltage**

**100 V**

**Power**

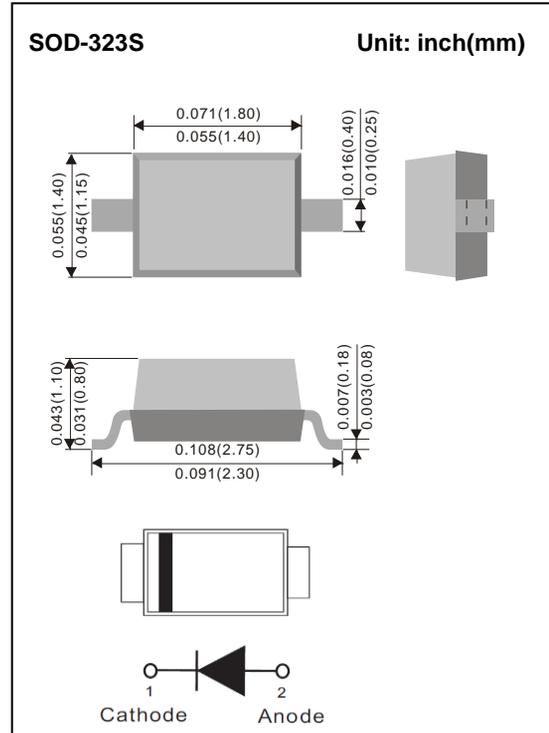
**200 mW**

### 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-323S, plastic
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Approx. Weight : 0.0042 grams



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

PARAMETER	SYMBOL	VALUE	UNIT
Reverse voltage	$V_R$	100	V
Maximum DC blocking voltage	$V_{DC}$	100	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 $25^\circ\text{C}$	$P_D$	200	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	$C_J$	1.5	pF
Measured at 1MHz and applied $V_R=0\text{V}$			
Maximum reverse recovery time	(Note 2) $T_{RR}$	4	ns
Typical thermal resistance	(Note 1) $R_{\theta JA}$	650	$^\circ\text{C/W}$
Operating and storage temperature range	$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

NOTES : 1. Mounted on a FR4, single-sided copper, with mini pad.

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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## TYPICAL CHARACTERISTIC CURVES

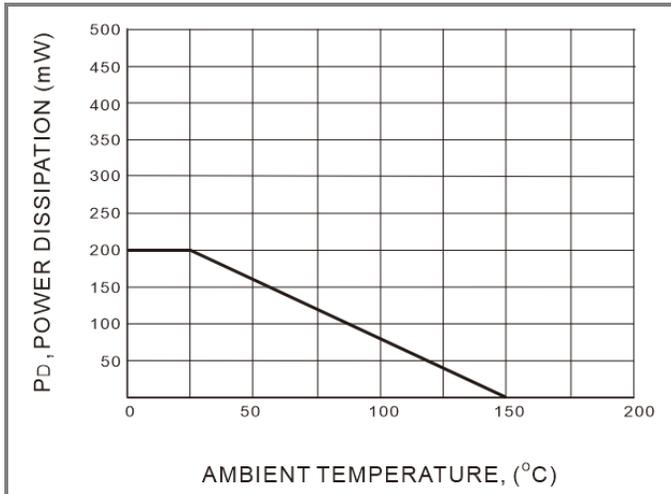


Fig.1 Power Derating Curve

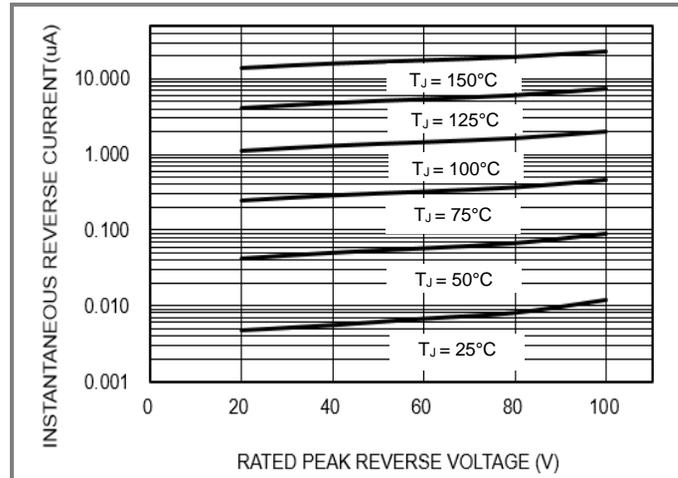


Fig.2 Typical Reverse Characteristics

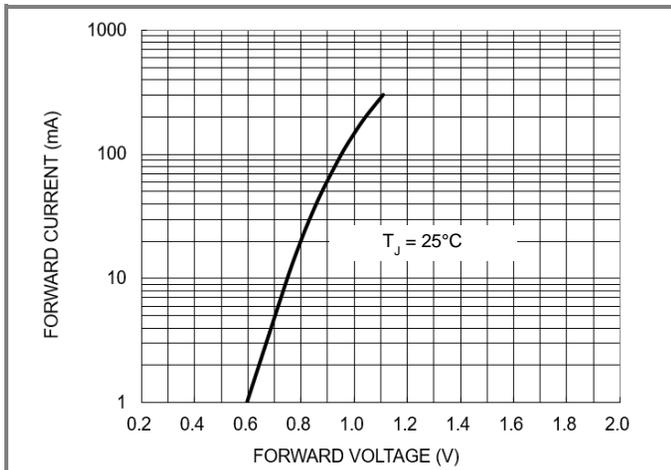


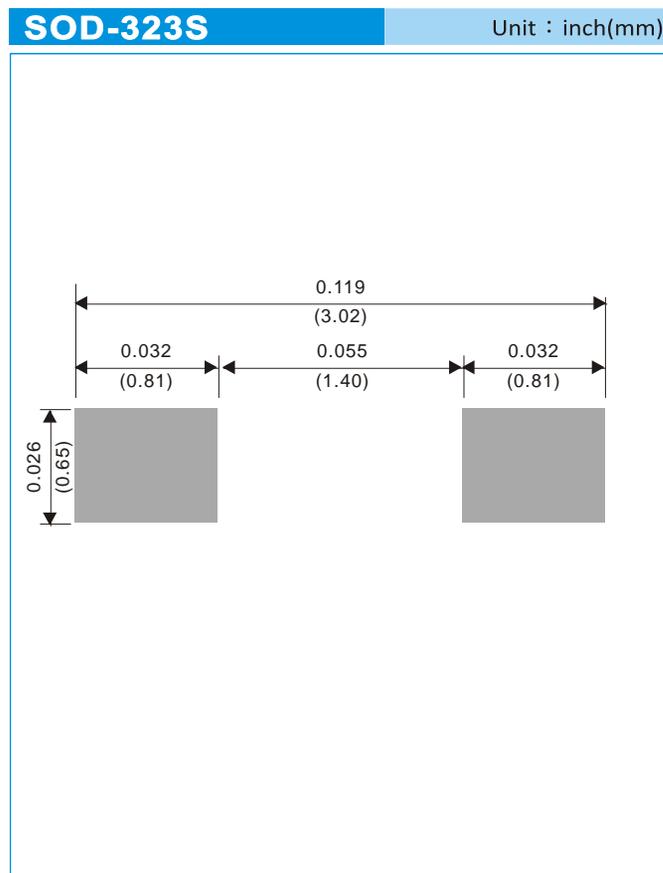
Fig.3 Typical Forward Characteristics

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## Product and Packing Information

Part No.	Package Type	Packing Type	Marking
1N4148WSG	SOD-323S	3K pcs / 7" reel	A2

## Mounting Pad Layout



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