

1N4148WS

SURFACE MOUNT SWITCHING DIODES

Voltage

100 V

Power

250mW

Features

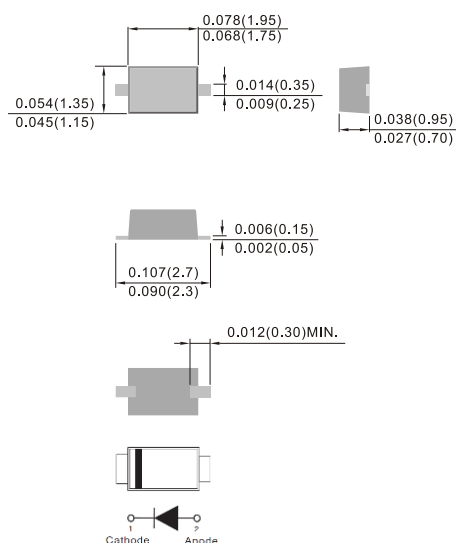
- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

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

SOD-323

Unit: inch(mm)



Maximum Ratings (T_A=25°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°C	I _{F(AV)}	200	mA
Peak forward surge current	I _{FSM}	4 1.5 0.5	A
Power dissipation derate above 25°C	P _D	250	mW
Maximum forward voltage	V _F	0.715@1mA 0.855@10mA 1@50mA 1.25@150mA	V
Maximum dc reverse current at rated dc blocking voltage	I _R	0.025@20V 2.5@75V	μA
Junction capacitance Measured at 1MHz and applied V _R =0V	C _J	1.5	pF
Maximum reverse recovery time	(Note 3) T _{RR}	4	ns
Typical thermal resistance	(Note 1) R _{θJA} (Note 2) R _{θJA} (Note 4) R _{θJC} (Note 4) R _{θJL}	500 650 280 400	°C/W
Operating and storage temperature range	T _J , T _{STG}	-55 to +150	°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=10mA to I_R=1mA, V_R=6Volts, R_L=100Ω.

4. Mounted on a FR-4 PCB, single-sided copper, mini pad, with 100cm² copper pad area.

1N4148WS

TYPICAL CHARACTERISTIC CURVES

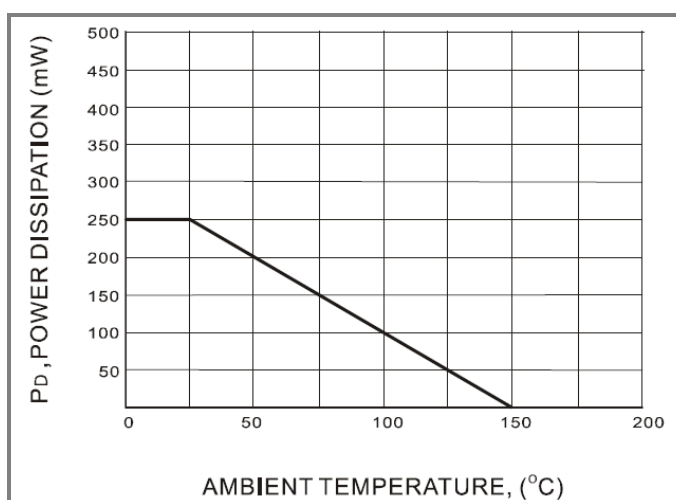


Fig.1 Power Derating Curve

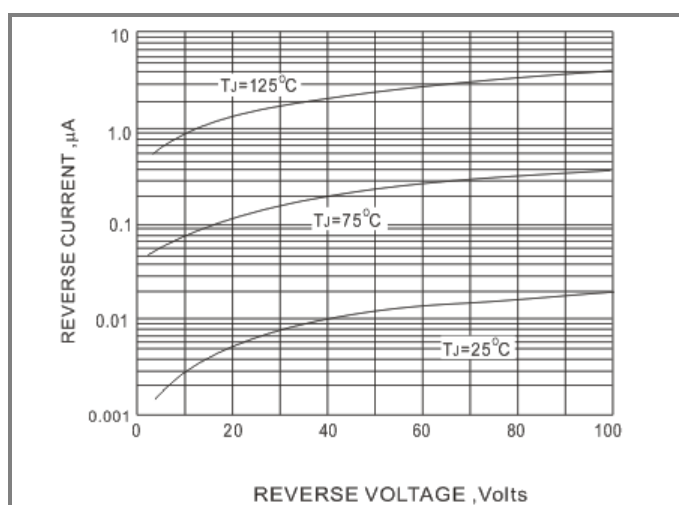


Fig.2 Typical Reverse Characteristics

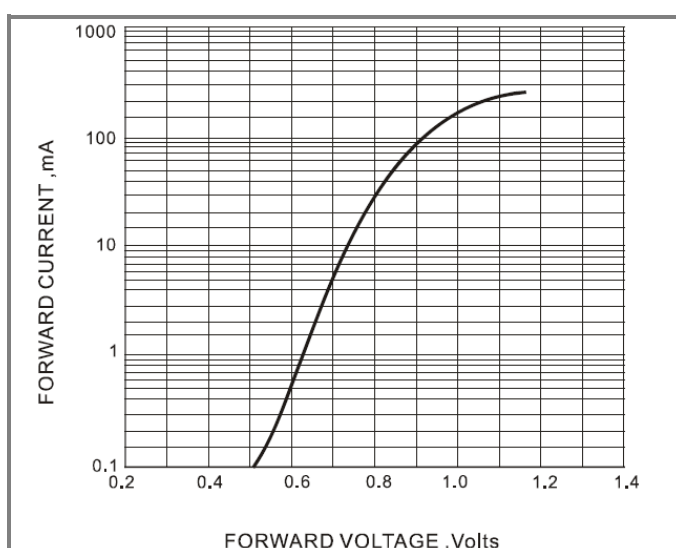


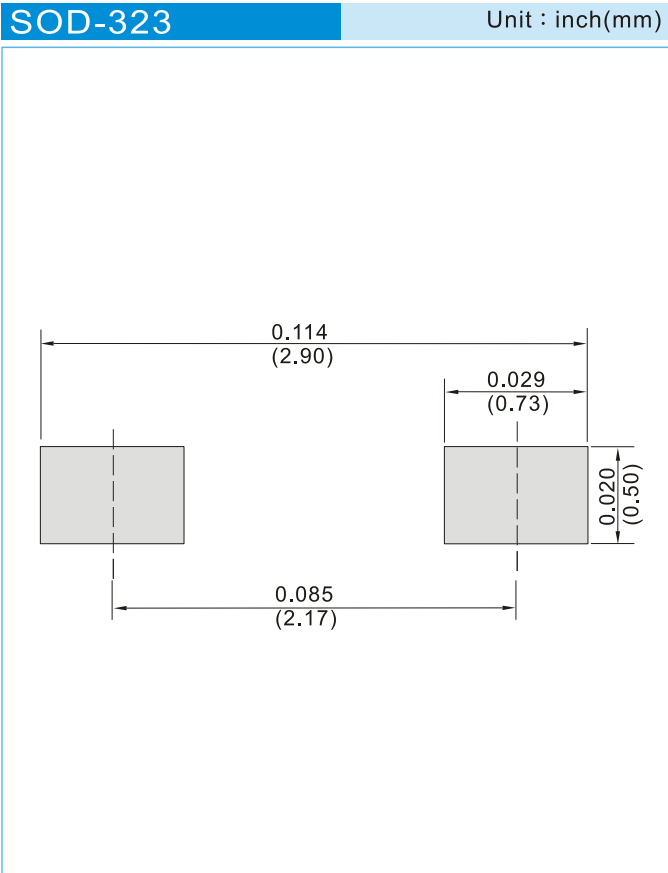
Fig.3 Typical Forward Characteristics

1N4148WS

Product and Packing Information

Part No.	Package Type	Packing Type	Marking
1N4148WS	SOD-323	5K pcs / 7" reel	A2
1N4148WS	SOD-323	12K pcs / 13" reel	A2

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.