



### SURFACE MOUNT SWITCHING DIODES

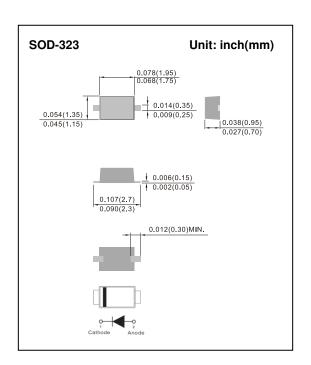
Voltage 100 V Power 250mW

#### **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<sub>A</sub>=25°C unless otherwise noted)

PARAMETER		SYMBOL	1N4148WS-AU	UNIT
Marking code		-	A2	-
Reverse voltage		VR	75	V
Maximum dc blocking voltage		VDC	75	V
Peak reverse voltage		V <sub>RM</sub>	100	V
RMS voltage		VRMS	50	V
Maximum average forward current at T <sub>A</sub> =25°C		lf(AV)	200	mA
Peak forward surge current	0.001ms 10ms 1s	Iғsм	4 1.5 0.5	А
Power dissipation derate above 25°C		PD	250	mW
Maximum forward voltage		VF	0.715@1mA 0.855@10mA 1@50mA 1.25@150mA	V
Maximum dc reverse current at rated dc blocking voltage		lR	0.025@20V 2.5@75V	μΑ
Junction capacitance  Measured at 1MHz and applied VR=0V		Cı	1.5	pF
Maximum reverse recovery time	(Note 3)	T <sub>RR</sub>	4	ns
Typical thermal resistance	(Note 1)	Reja	500	
	(Note 2) (Note 4)	Reja Rejc	650 280	°C/W
Operating and storage temperature range		Rejl Tj, Tstg	400 -55 to +150	°C

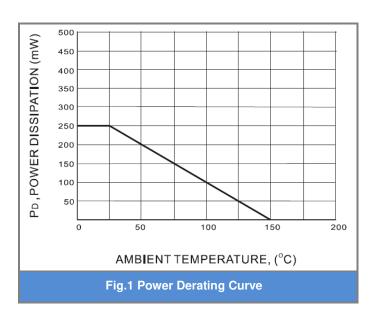
Note: 1. Mounted on a FR4, single-sided copper, with 50 x 15mm PCB.

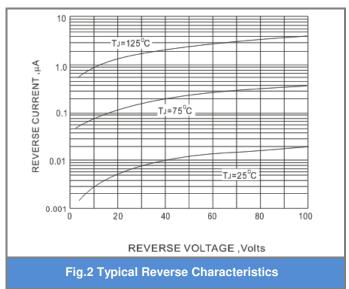
- 2. Mounted on a FR4, single-sided copper, with mini pad.
- 3. From IF=10mA to IR=1mA, VR=6Volts,  $R_L$ =100 $\Omega$ .
- 4. Mounted on a FR-4 PCB, single-sided copper, mini pad, with 100cm<sup>2</sup> copper pad area.

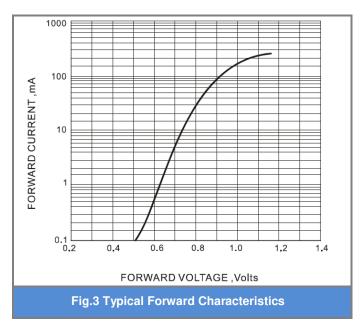




### TYPICAL CHARACTERISTIC CURVES







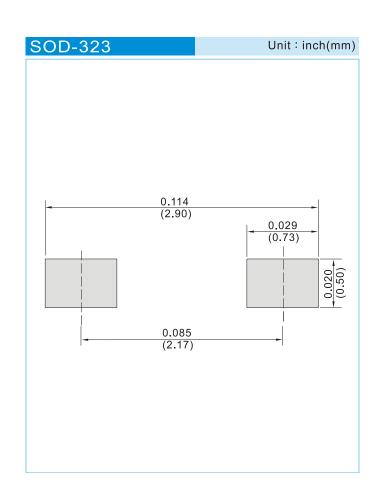




### **Part No Packing Code Version**

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**







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