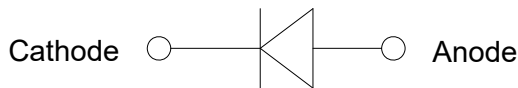


## Small Signal Fast Switching Diode

**SOD-223**  
**IN4148WS**



**Marking:T4**

### Features

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion.

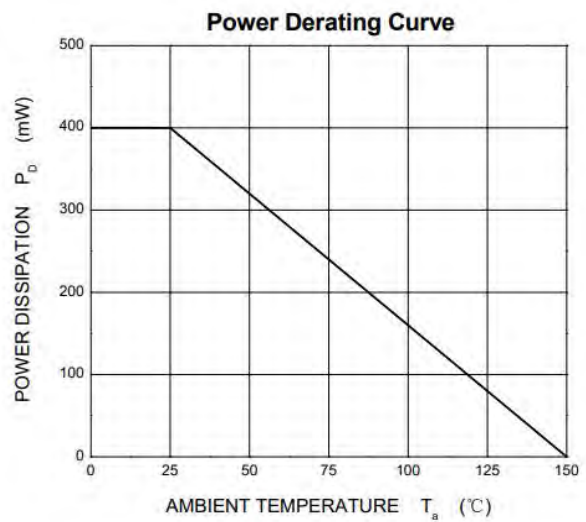
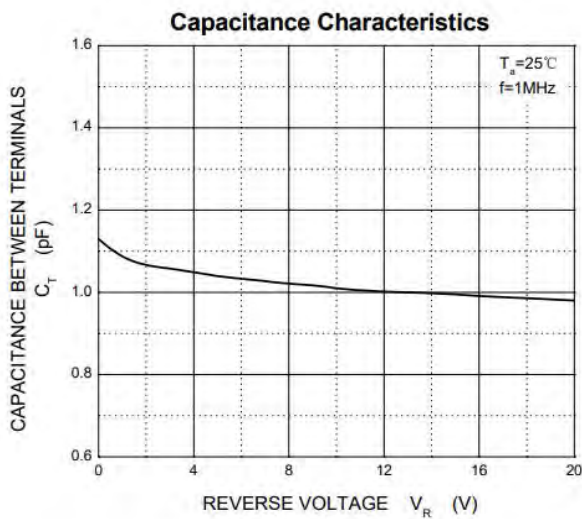
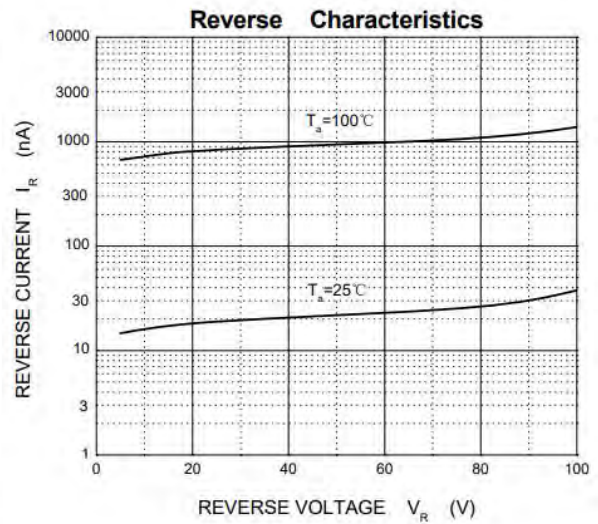
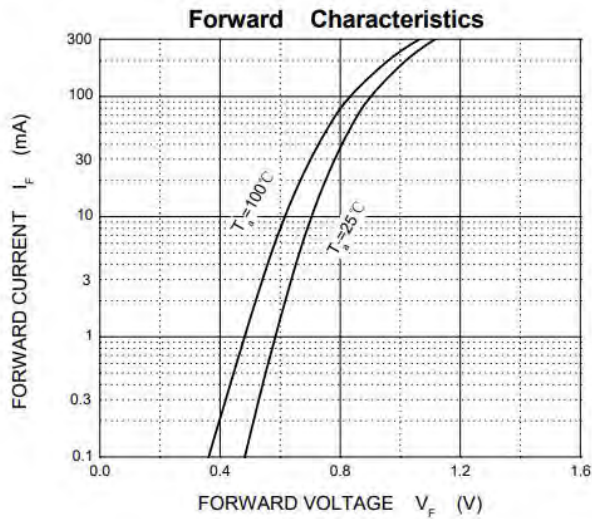
### Mechanical Data

- Package: SOD-323
- Lead: lead solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end

### ■ Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

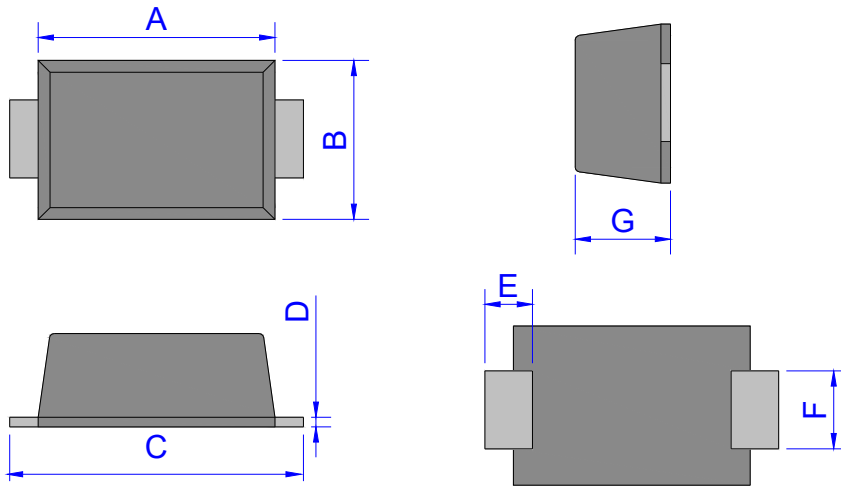
Parameter	Symbols	IN4148WS	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	100	V
Power dissipation	Pd	400	mW
Operating junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 ~ +150	°C
Thermal Resistance From Junction to Ambient	R <sub>θJA</sub>	312	°C/W
Average Rectified Output Current	I <sub>o</sub>	150	mA
Non-repetitive Peak Forward Current	I <sub>FM</sub>	300	mA
Reverse Recovery Time. I <sub>F</sub> =0.5A, I <sub>R</sub> =1A, I <sub>RR</sub> =0.25A (Type)	T <sub>rr</sub>	4.0	ns
Peak Forward Surge Current @t <sub>p</sub> =1us, T <sub>A</sub> =25°C	I <sub>FSM</sub>	2	A
Maximum Forward Voltage at 10mA and 25°C	V <sub>F</sub>	0.85	V
Maximum Forward Voltage at 0.15A and 25°C	V <sub>F</sub>	1.25	V
Maximum DC Reverse Current @T <sub>A</sub> =25°C	I <sub>R</sub>	25@V <sub>R</sub> =25V 100@V <sub>R</sub> =75V	nA
Typical Junction Capacitance (V <sub>R</sub> =0V, f=1MHz)	C <sub>j</sub>	4.0	pF

## RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



## PACKAGE OUTLINE DIMENSIONS

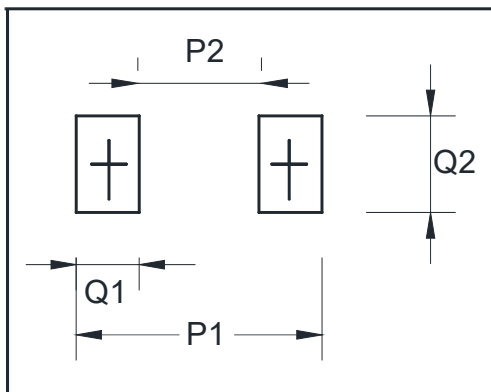
Note:unit mm(Mil)



## SOD-123 Mechanical Data

UNIT		A	B	C	D	E	F	G
mm	max	3.00	2.00	3.95	0.25	0.90	1.20	1.35
	min	2.60	1.60	3.45	0.10	0.30	0.80	0.95
mil	max	118.1	78.7	155.5	9.8	35.4	47.2	53.1
	min	102.4	63.0	135.8	3.93	11.8	31.5	37.4

## SOD-123 Suggested Pad Layout



UNIT		P1	Q1	Q2
mm	min	1.5	1.3	1.3
mil	min	59.0	51.2	51.2