

# 1N4148W

## FEATURES

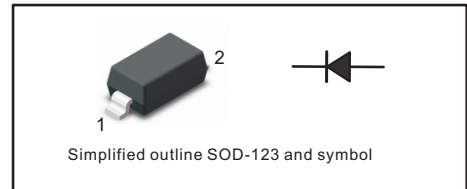
- For surface mounted applications
- Glass Passivated Chip Junction
- Fast reverse recovery time
- Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives

## MECHANICAL DATA

- Case: SOD-123
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 16mg/0.00056oz

## PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



## Absolute Maximum Ratings at 25 °C

Parameter	Symbols	1N4148W	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Maximum RMS voltage	$V_{RMS}$	75	V
Continuous Forward Current	$I_F$	300	mA
Non-reptitive Peak Forward Surge Current at 1ms	$I_{FSM}$	4	A
Total Power Dissipation	$P_{tot}$	400	mW
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150	°C

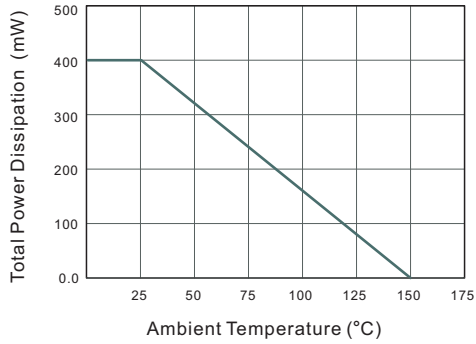
## Characteristics at $T_a = 25\text{ °C}$

Parameter	Symbols	1N4148W	Units
Reverse Breakdown Voltage at $I_R = 1\mu\text{A}$	$V_{(BR)R}$	75	V
Maximum Forward Voltage at 1 mA at 10 mA at 50 mA at 150 mA at 300 mA	$V_F$	0.715 0.855 1.00 1.25 1.5	V
Peak Reverse Current at $V_R = 20\text{V}$ $T_j = 25\text{ °C}$ at $V_R = 75\text{V}$ $T_j = 25\text{ °C}$ at $V_R = 25\text{V}$ $T_j = 150\text{ °C}$ at $V_R = 75\text{V}$ $T_j = 150\text{ °C}$	$I_R$	0.025 1 30 50	$\mu\text{A}$
Typical Junction Capacitance $f = 1\text{MHz}, V_R = 4\text{V}$	$C_j$	5	pF
Maximum Reverse Recovery Time <sup>(1)</sup>	$t_{rr}$ Typical	8	ns

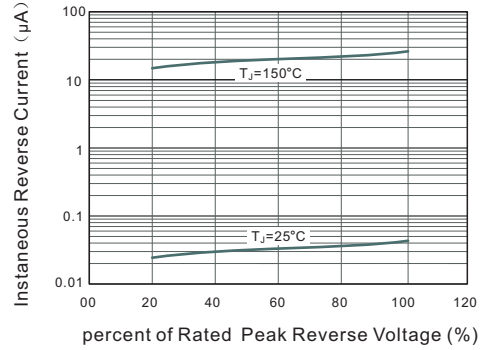
( 1 ) Measured with  $I_F = 0.5\text{ A}$ ,  $I_R = 1\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$

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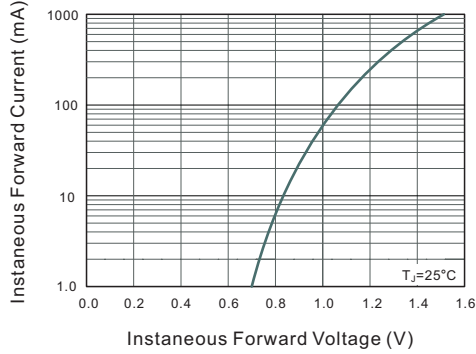
**Fig.1 Power Derating Curve**



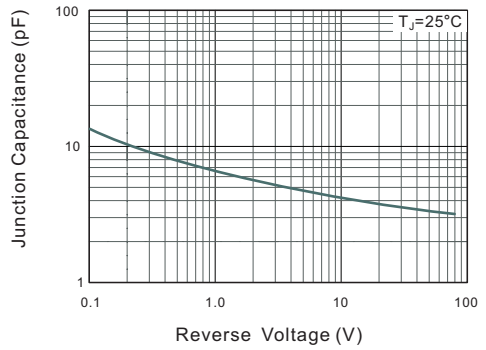
**Fig.2 Typical Reverse Characteristics**



**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**

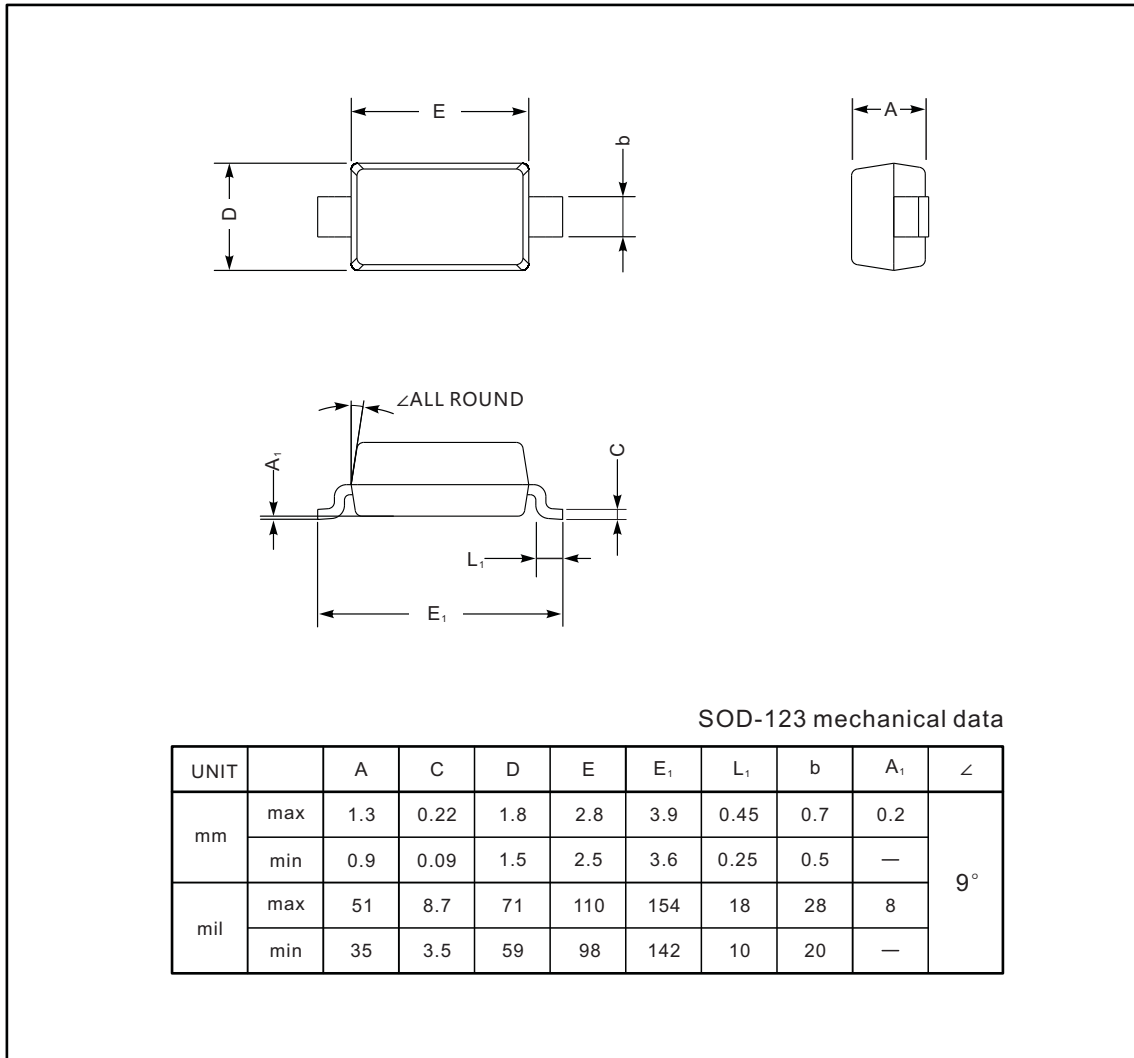


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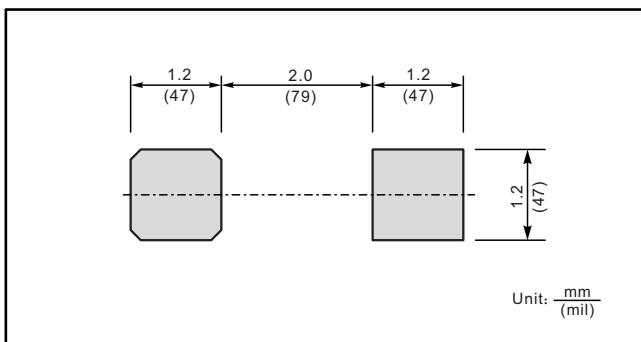
## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



### The recommended mounting pad size



### Marking

Type number	Marking code
1N4148W	T4