

# EVVOSEMI<sup>®</sup>

THINK CHANGE DO



ESD



TVS



MOS



LDO



Diode



Sensor



DC-DC

## Product Specification

|              |             |          |
|--------------|-------------|----------|
| ▶ Domestic   | Part Number | 1N4148WS |
| ▶ Overseas   | Part Number | 1N4148WS |
| ▶ Equivalent | Part Number | 1N4148WS |

EV is the abbreviation of name EVVO

## FEATURES

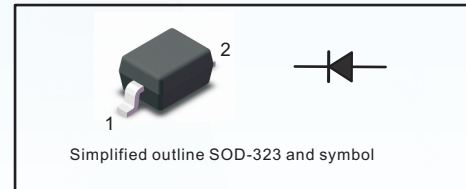
- For surface mounted applications
- Glass Passivated Chip Junction
- Fast reverse recovery time
- Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives

## MECHANICAL DATA

- Case: SOD-323
- Terminals: Solderable per MIL-STD-750, Method 2026

## PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1   | Cathode     |
| 2   | Anode       |



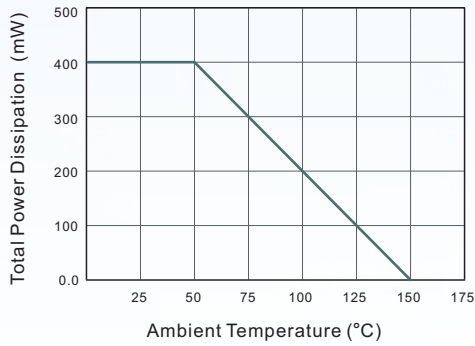
## Absolute Maximum Ratings at 25 °C

| Parameter                                       | Symbols        | 1N4148WS   | 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    |

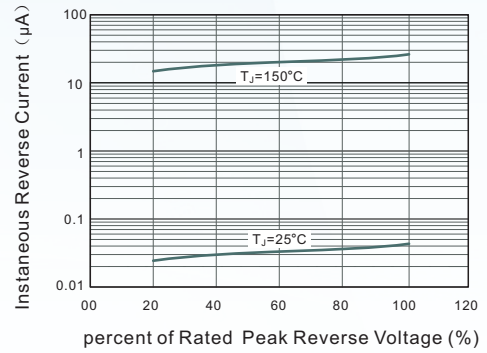
## Characteristics at $T_a = 25\text{ °C}$

| Parameter  | Symbols             | 1N4148WS                       | Units         |
|--|---------------------|--------------------------------|---------------|
| Reverse Breakdown Voltage at $I_R = 1\mu\text{A}$  | $V_{(BR)R}$         | 75                             | V             |
| Maximum Forward Voltage<br>at 1 mA<br>at 10 mA<br>at 50 mA<br>at 150 mA  | $V_F$               | 0.715<br>0.855<br>1.00<br>1.25 | V             |
| Peak Reverse Current<br>at $V_R = 20\text{V}$ $T_j = 25\text{°C}$<br>at $V_R = 75\text{V}$ $T_j = 25\text{°C}$<br>at $V_R = 25\text{V}$ $T_j = 150\text{°C}$<br>at $V_R = 75\text{V}$ $T_j = 150\text{°C}$ | $I_R$               | 0.025<br>1<br>30<br>50         | $\mu\text{A}$ |
| Typical Junction Capacitance   | $C_j$               | 5                              | pF            |
| Maximum Reverse Recovery Time  | $t_{rr}$<br>Typical | 8                              | ns            |

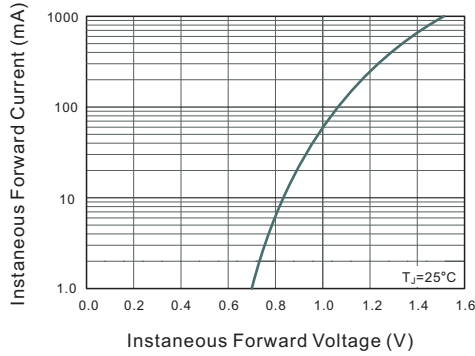
**Fig.1 Forward Current Derating Curve**



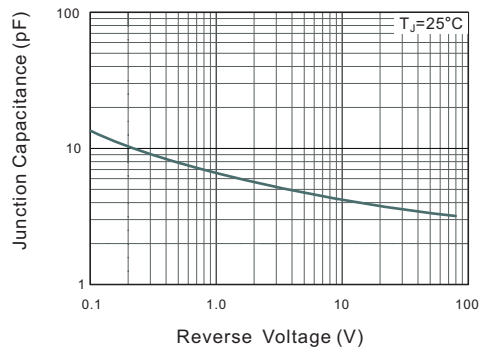
**Fig.2 Typical Reverse Characteristics**



**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



**PACKAGE OUTLINE**

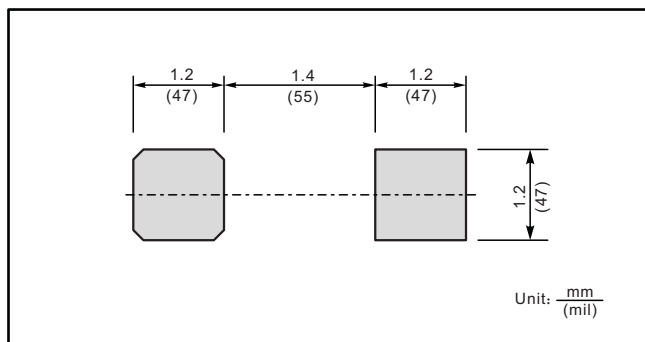
Plastic surface mounted package; 2 leads

SOD-323

**SOD-323 mechanical data**

| UNIT |     | A   | C    | D   | E   | E <sub>1</sub> | b    | L <sub>1</sub> | A <sub>1</sub> | ∠  |
|------|-----|-----|------|-----|-----|----------------|------|----------------|----------------|----|
| mm   | max | 1.1 | 0.15 | 1.4 | 1.8 | 2.75           | 0.4  | 0.45           | 0.2            | 9° |
|      | min | 0.8 | 0.08 | 1.2 | 1.4 | 2.55           | 0.25 | 0.2            | —              |    |
| mil  | max | 43  | 5.9  | 55  | 70  | 108            | 16   | 16             | 8              |    |
|      | min | 32  | 3.1  | 47  | 63  | 100            | 9.8  | 7.9            | —              |    |

**The recommended mounting pad size**



**Marking**

| Type number | Marking code |
|-------------|--------------|
| 1N4148WS    | T4           |

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