



# 1N4148WT

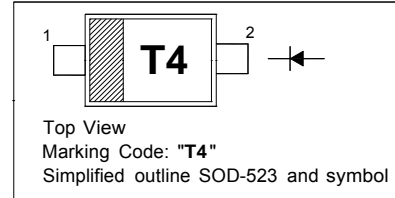
## Silicon Epitaxial Planar Switching Diode

### Features

- Extremely small surface mounting type
- High reliability

### PINNING

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



### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

| Parameter  | Symbol      | Value         | Unit             |
|--|-------------|---------------|------------------|
| Peak Reverse Voltage   | $V_{RM}$    | 90            | V                |
| Reverse Voltage  | $V_R$       | 80            | V                |
| Average Rectified Forward Current                                | $I_{F(AV)}$ | 100           | mA               |
| Peak Forward Current   | $I_{FM}$    | 225           | mA               |
| Non-repetitive Peak Forward Surge Current (at $t = 1\text{ s}$ ) | $I_{FSM}$   | 500           | mA               |
| Junction Temperature   | $T_j$       | 150           | $^\circ\text{C}$ |
| Storage Temperature Range  | $T_{stg}$   | - 55 to + 150 | $^\circ\text{C}$ |

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

| Parameter   | Symbol   | Max. | Unit          |
|---|----------|------|---------------|
| Forward Voltage<br>at $I_F = 100\text{ mA}$   | $V_F$    | 1.2  | V             |
| Reverse Current<br>at $V_R = 80\text{ V}$   | $I_R$    | 0.1  | $\mu\text{A}$ |
| Capacitance Between Terminals<br>at $V_R = 0.5\text{ V}$ , $f = 1\text{ MHz}$                     | $C_T$    | 3    | pF            |
| Reverse Recovery Time<br>at $V_R = 6\text{ V}$ , $I_F = 10\text{ mA}$ , $R_L = 100\text{ }\Omega$ | $t_{rr}$ | 4    | ns            |



# RATINGS AND CHARACTERISTIC CURVES 1N4148WT

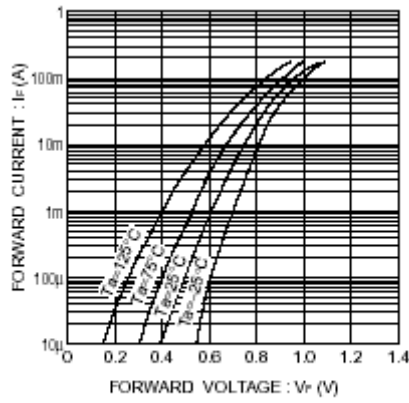


Fig.1 Forward characteristics

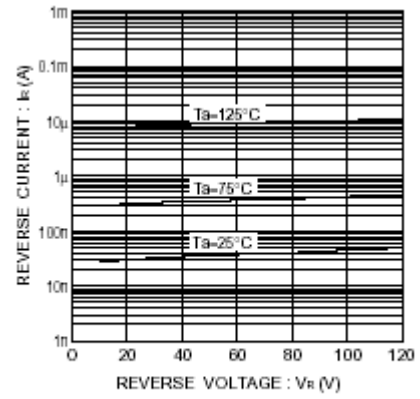


Fig.2 Reverse characteristics

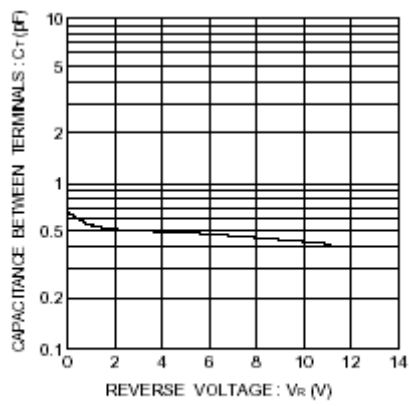


Fig.3 Capacitance between terminals

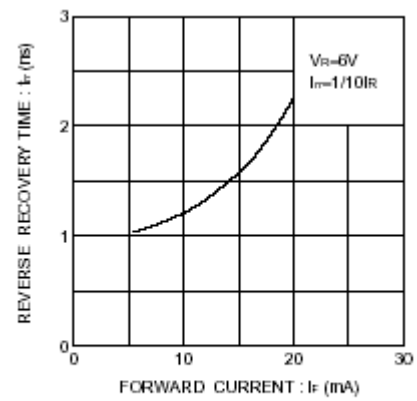


Fig.4 Reverse recovery time characteristics

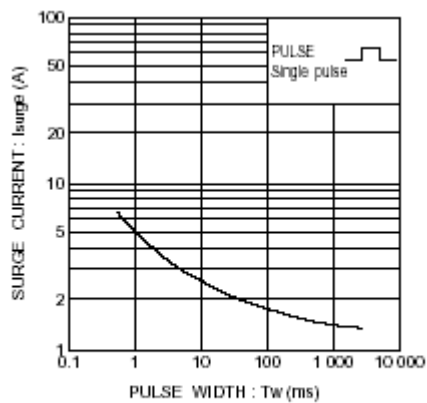


Fig.5 Surge current characteristics

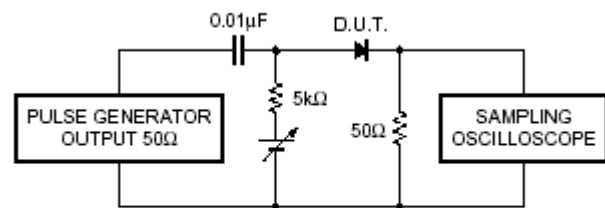


Fig.6 Reverse recovery time ( $t_r$ ) measurement circuit

The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考!)

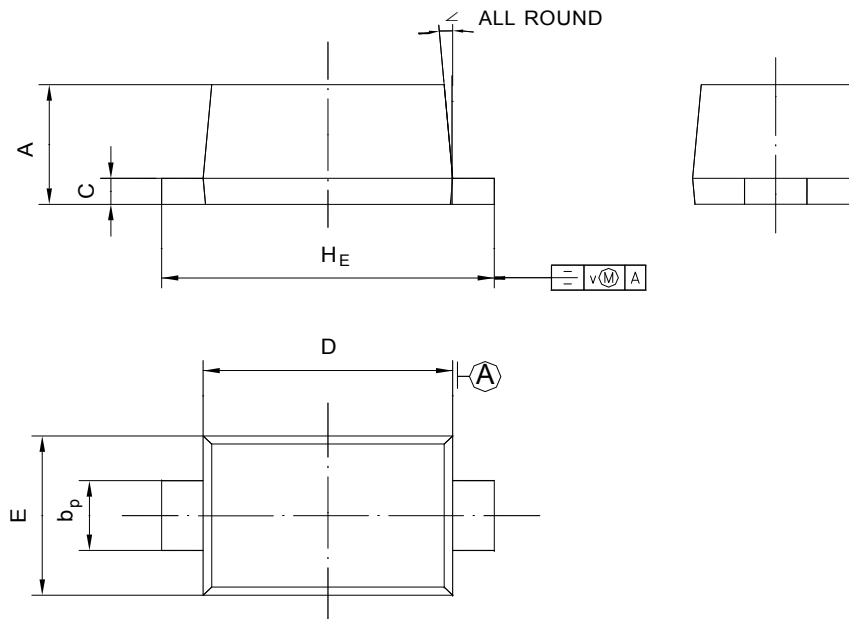


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## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



| UNIT | A            | b <sub>p</sub> | C              | D            | E            | H <sub>E</sub> | V   | ∠  |
|------|--------------|----------------|----------------|--------------|--------------|----------------|-----|----|
| mm   | 0.70<br>0.60 | 0.4<br>0.3     | 0.135<br>0.100 | 1.25<br>1.15 | 0.85<br>0.75 | 1.7<br>1.5     | 0.1 | 5° |

