



FEATURES

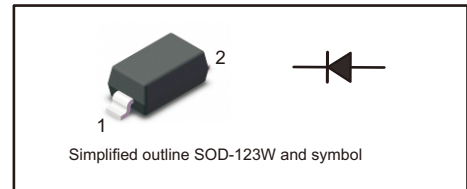
- For surface mounted applications
- Fast reverse recovery time
- Ideal for automated placement

MECHANICAL DATA

- Case: SOD-123W
- 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 | T-1N4148WA | Units |
|---|------------------------------------|---------------|-------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 100 | V |
| Maximum RMS voltage | V_{RMS} | 75 | V |
| Average Rectified Forward Current | $I_{F(AV)}$ | 150 | mA |
| Non-repetitive Peak Forward Surge Current | I_{FSM} | 0.5 1 4 | A |
| Total Power Dissipation | P_{tot} | 400 | mW |
| Typical Thermal Resistance (1) | $R_{\theta JA}$ $R_{\theta JC}$ | 280 100 | °C/W |
| Operating and Storage Temperature Range | T_j, T_{stg} | -55 ~ +150 | °C |

(1) P.C.B. mounted with 5*5mm copper pad areas.

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

| Parameter | Symbols | T-1N4148WA | Units |
|---|-------------|--------------------------------|---------------|
| Reverse Breakdown Voltage at $I_R=1\mu\text{A}$ | $V_{(BR)R}$ | 100 | V |
| Maximum Forward Voltage | V_F | 0.715 0.855 1.00 1.25 | V |
| Peak Reverse Current | I_R | 0.025 1 30 50 | μA |
| Typical Junction Capacitance | C_j | 2 | pF |
| Maximum Reverse Recovery Time (2) | t_{rr} | 4 | ns |

(2) Measured with $I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R, R_L=100\Omega$



Typical Performance Characteristics

Fig.1 Power Derating Curve

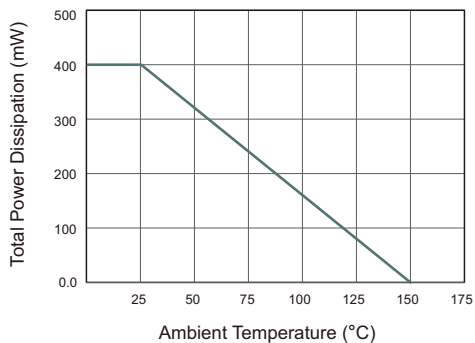


Fig.2 Typical Reverse Characteristics

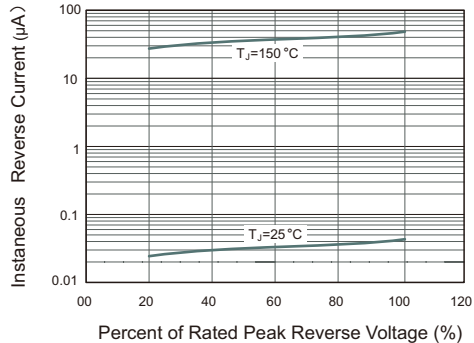


Fig.3 Typical Instantaneous Forward Characteristics

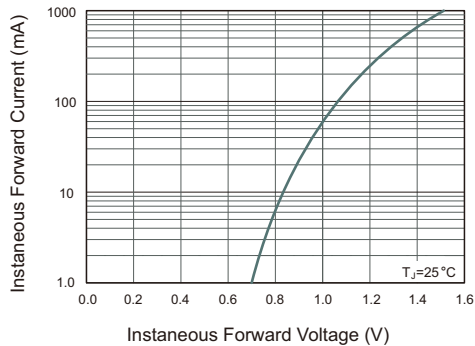
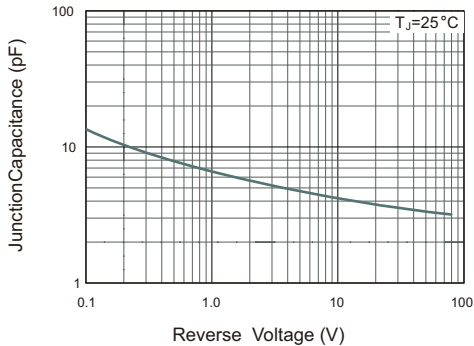


Fig.4 Typical Junction Capacitance

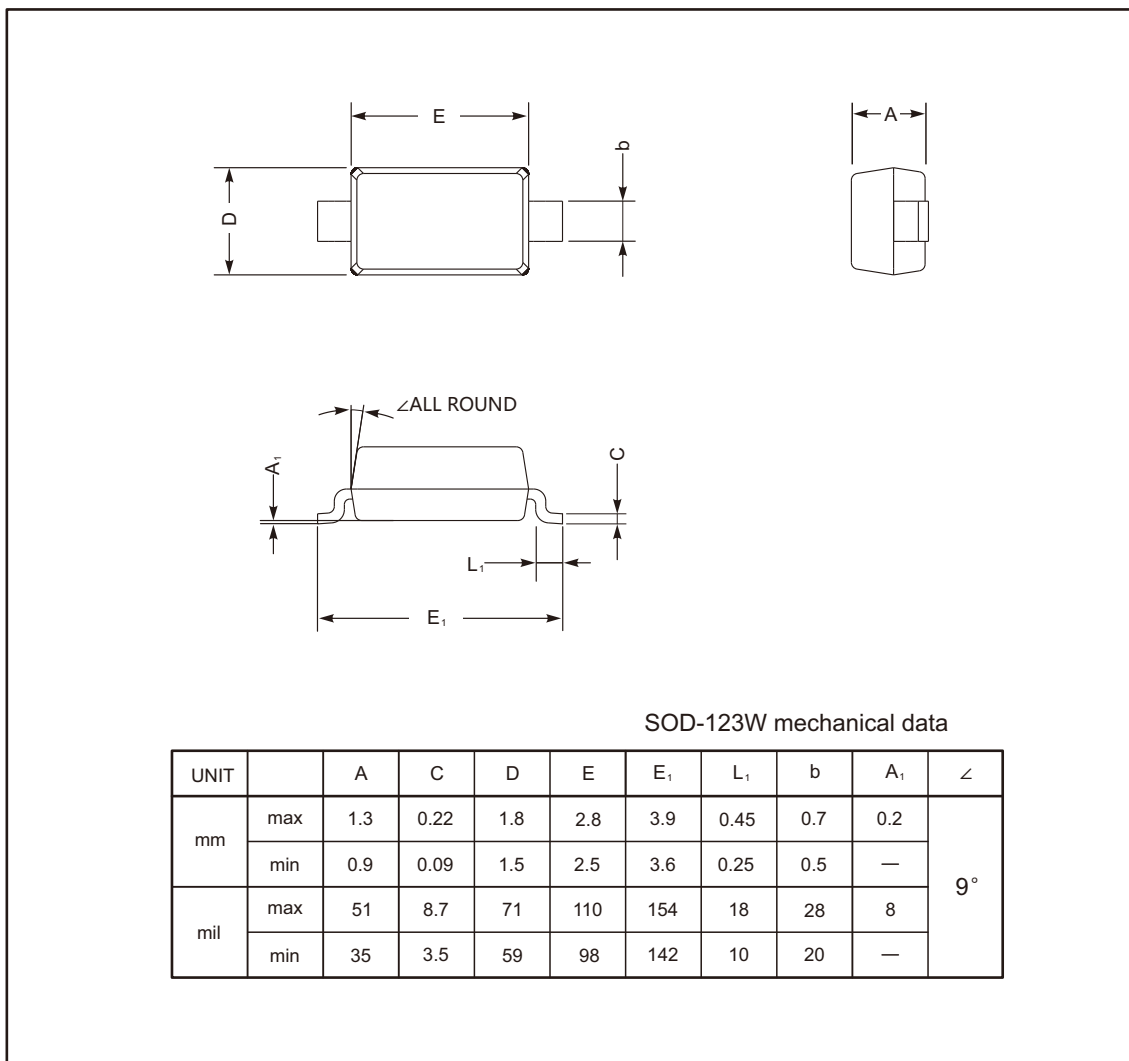




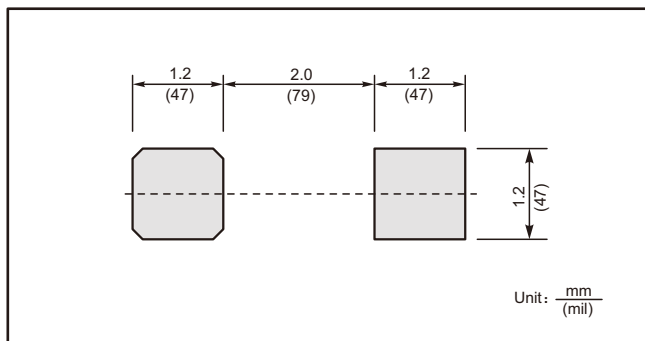
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123W



The recommended mounting pad size



Marking

| Type number | Marking code |
|-------------|--------------|
| T-1N4148WA | T4 |



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