



FEATURES

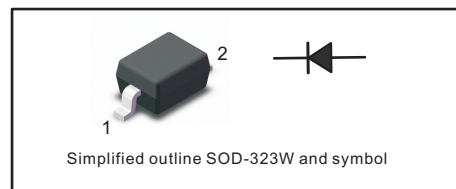
- For surface mounted applications
- Glass Passivated Chip Junction
- Fast reverse recovery time
- Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: SOD-323W
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 5.48mg / 0.00019oz

PINNING

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



Absolute Maximum Ratings at 25 °C

| Parameter | Symbols | T-1N4148WB | 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 |
| at 1s at 1ms at 1us | | | |
| 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 | T-1N4148WB | Units |
|--|-------------|--------------------------------|---------|
| Reverse Breakdown Voltage at $I_R = 1\mu A$ | $V_{(BR)R}$ | 75 | V |
| Maximum Forward Voltage | V_F | 0.715 0.855 1.00 1.25 | V |
| at 1 mA at 10 mA at 50 mA at 150 mA | | | |
| Peak Reverse Current | I_R | 0.025 1 30 50 | μA |
| at $V_R = 20V$ $T_j = 25\text{ °C}$ at $V_R = 75V$ $T_j = 25\text{ °C}$ at $V_R = 25V$ $T_j = 150\text{ °C}$ at $V_R = 75V$ $T_j = 150\text{ °C}$ | | | |
| Typical Junction Capacitance $f = 1MHz, V_R = 0V$ | C_j | 2 | pF |
| Maximum Reverse Recovery Time ⁽¹⁾ | t_{rr} | 4 | ns |

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



Fig.1 Power Derating Curve

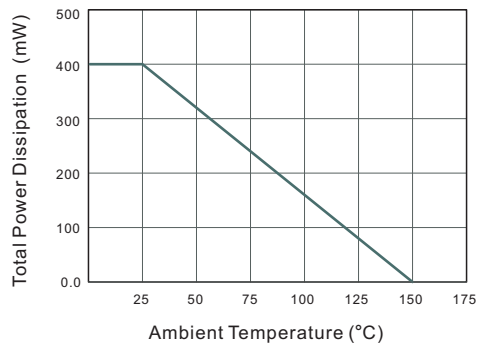


Fig.2 Typical Reverse Characteristics

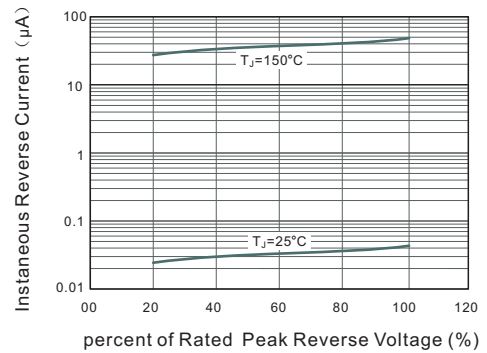


Fig.3 Typical Instantaneous Forward Characteristics

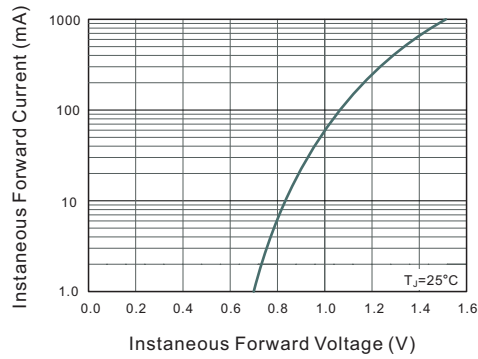
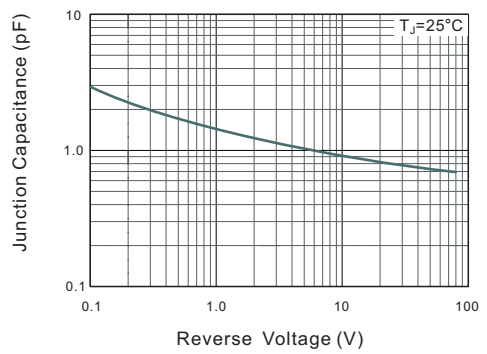


Fig.4 Typical Junction Capacitance

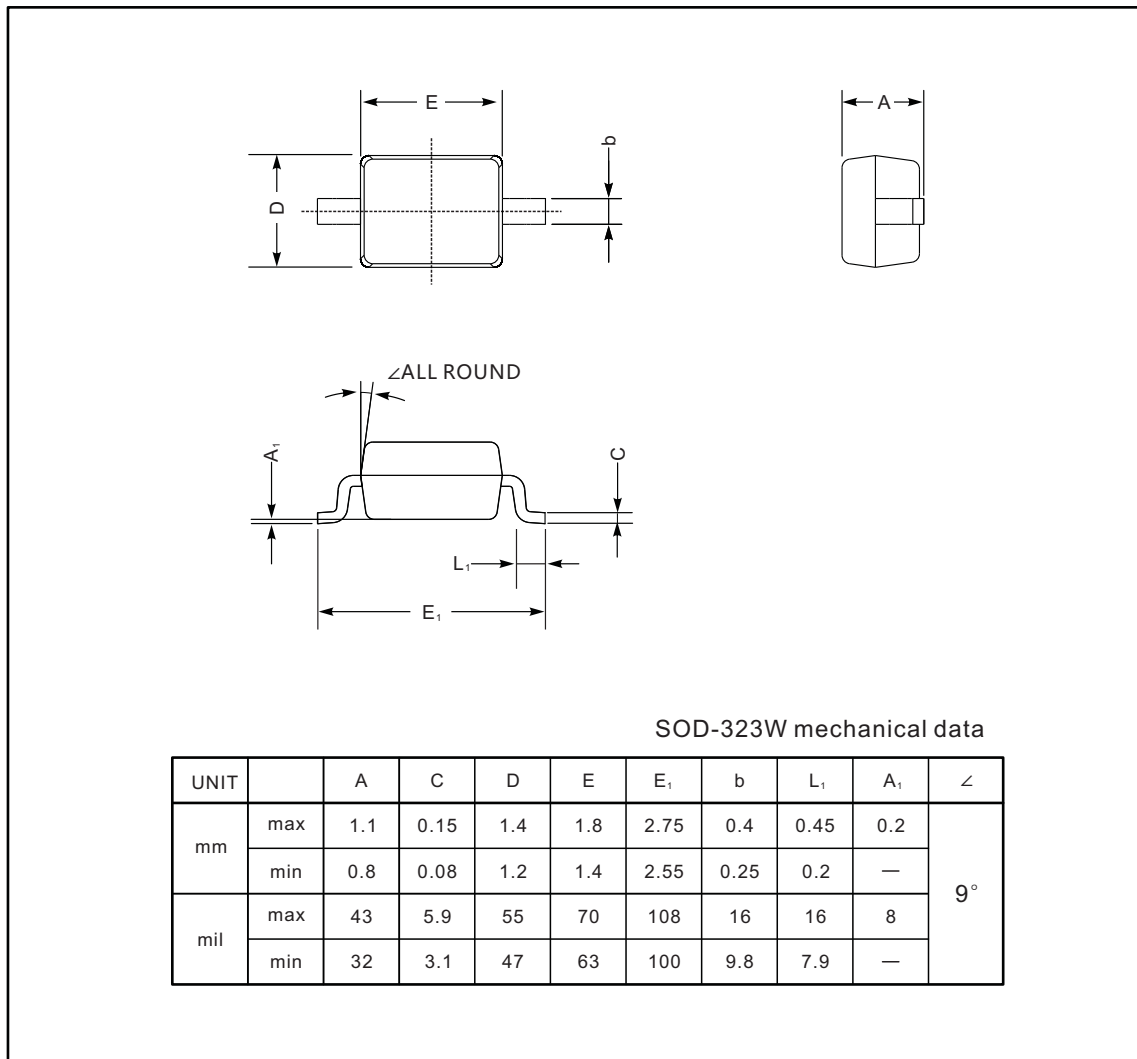




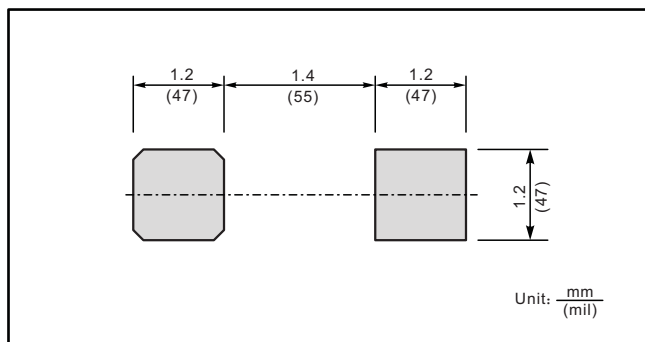
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323W



The recommended mounting pad size



Marking

| Type number | Marking code |
|-------------|--------------|
| T-1N4148WB | T4 |