

FEATURES

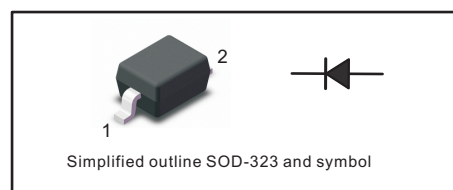
- For surface mounted applications
- Glass Passivated Chip Junction
- Fast reverse recovery time
- Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives

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 $I_R = 1\text{ }\mu\text{A}$ | $V_{(BR)R}$ | 75 | V |
| Maximum Forward Voltage at 1 mA at 10 mA at 50 mA at 150 mA | V_F | 0.715 0.855 1.00 1.25 | 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 | μA |
| Typical Junction Capacitance | C_j | 5 | pF |
| Maximum Reverse Recovery Time | t_{rr} Typical | 8 | ns |

Fig.1 Forward Current Derating Curve

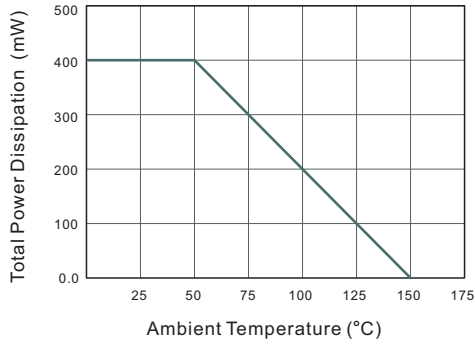


Fig.2 Typical Reverse Characteristics

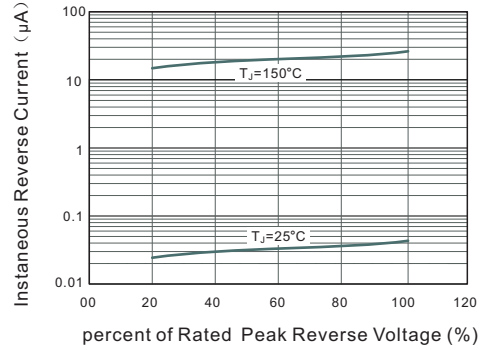


Fig.3 Typical Instantaneous Forward Characteristics

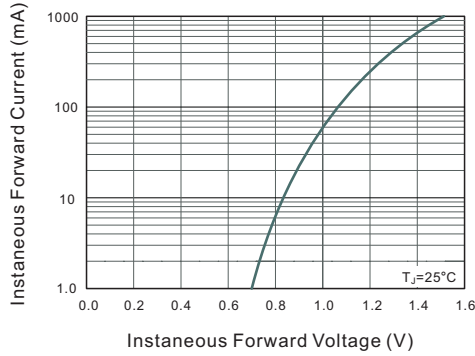
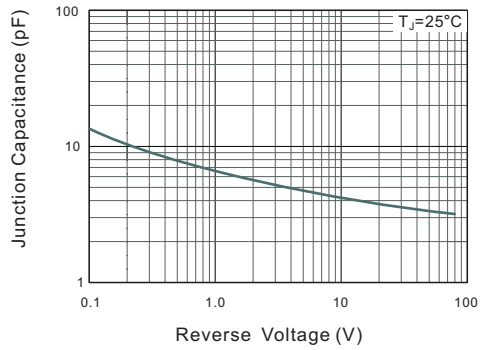


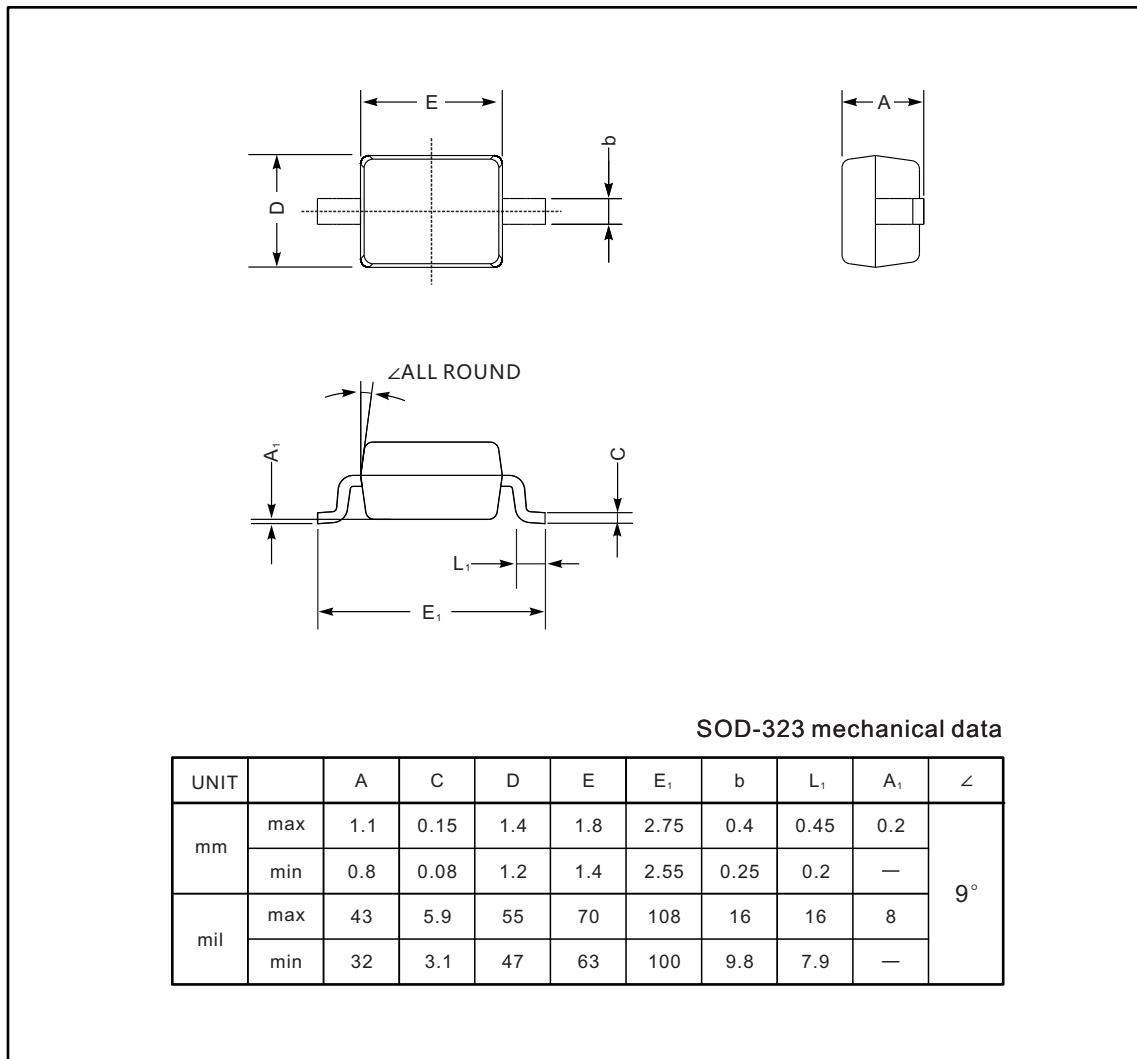
Fig.4 Typical Junction Capacitance



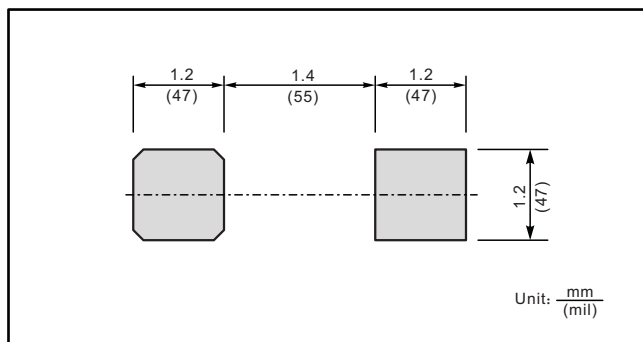
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



The recommended mounting pad size



Marking

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