

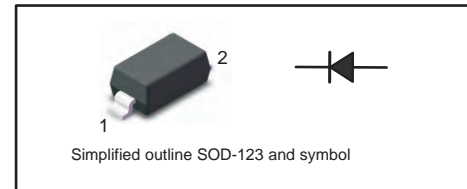
FEATURES

- 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
- AEC-Q101 qualified

MECHANICAL DATA

- Case: SOD-123
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 16mg/0.00056oz

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings at Ta=25°C

PARAMETER	SYMBOL	1N4148W	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-repetitive 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 Ta=25°C

PARAMETER	SYMBOL	1N4148W	UNITS
Reverse Breakdown Voltage at $I_R=1 \mu A$	$V_{(BR)R}$	75	V
Maximum Forward Voltage at 1 m A at 10 m A at 50 m A at 150 m A at 300 m A	V_F	0.715 0.855 1.00 1.25 1.5	V
Peak Reverse Current at $V_R=20V$ $T_F=25^\circ C$ at $V_R=75V$ $T_F=25^\circ C$ at $V_R=25V$ $T_F=150^\circ C$ at $V_R=75V$ $T_F=150^\circ C$	I_R	0.025 1 30 50	μA
Typical Junction Capacitance	C_j	5	pF
Maximum Reverse Recovery Time ⁽¹⁾	t_{rr} (Typical)	8	ns

(1) Measured with $F = 0.5 A, I_R = 1 A, I_{rr} = 0.25 A$

Fig.1 Forward Current Derating Curve

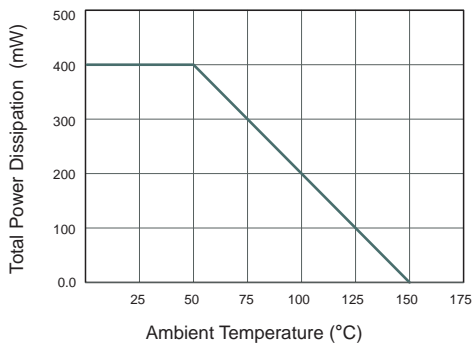


Fig.2 Typical Reverse Characteristics

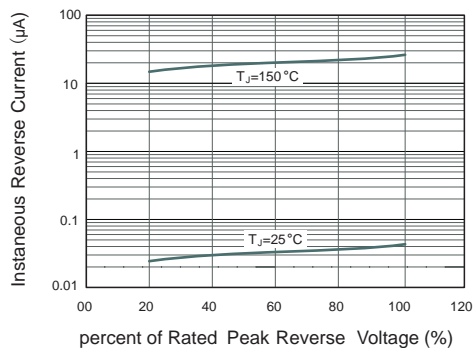


Fig.3 Typical Instantaneous Forward Characteristics

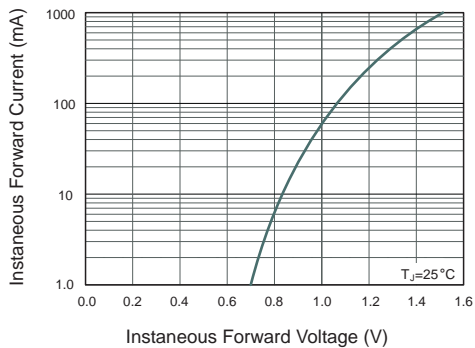
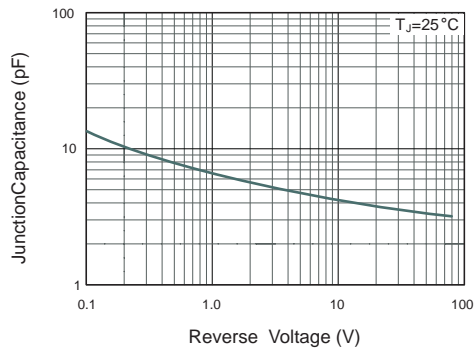


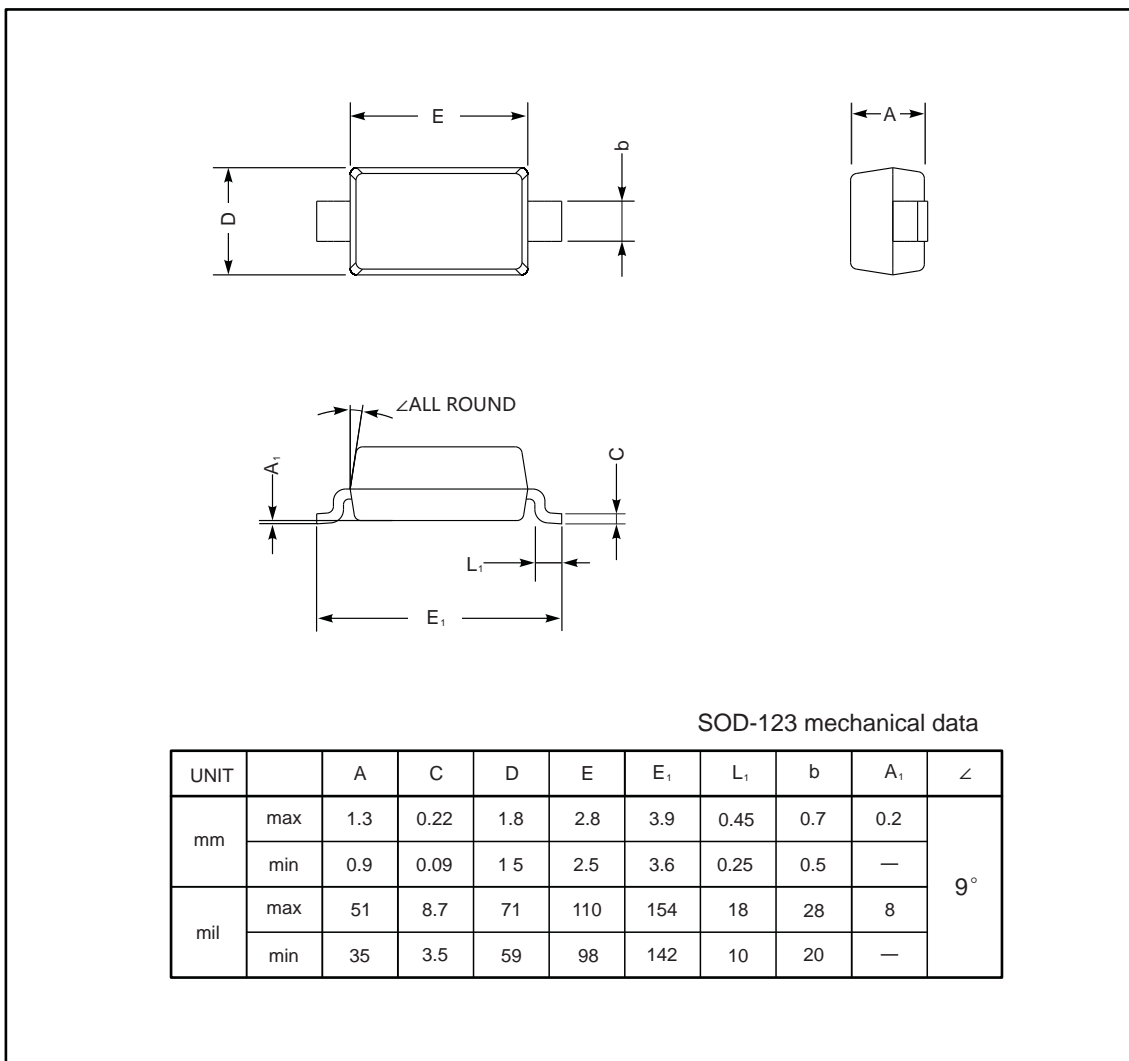
Fig.4 Typical Junction Capacitance



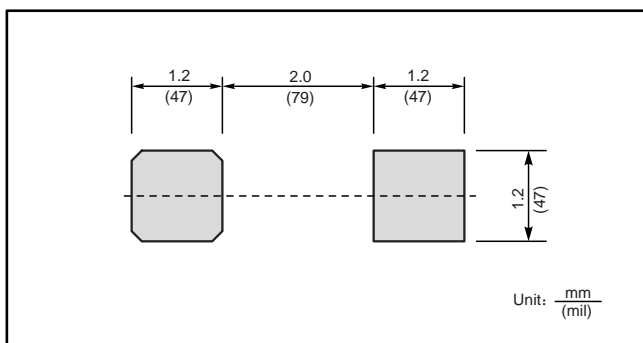
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



The recommended mounting pad size



Marking

Type number	Marking code
1N4148W	T4