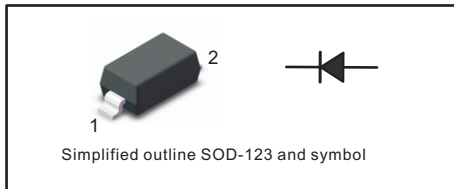


PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Absolute Maximum Ratings at 25 °C

Parameter	Symbols	KRN4148W	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 $T_a = 25\text{ °C}$

Parameter	Symbols	KRN4148W	Units
Reverse Breakdown Voltage at $I_R = 1\mu\text{A}$	$V_{(BR)R}$	75	V
Maximum Forward Voltage at 1 mA at 10 mA at 50 mA at 150 mA at 300 mA	V_F	0.715 0.855 1.00 1.25 1.5	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 $f = 1\text{MHz}, V_R = 4\text{V}$	C_j	5	pF
Maximum Reverse Recovery Time ⁽¹⁾	t_{rr} Typical	8	ns

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

Fig.1 Power Derating Curve

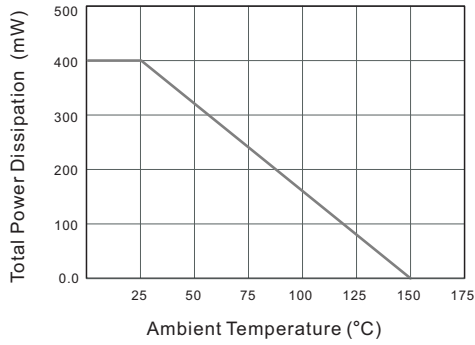


Fig.2 Typical Reverse Characteristics

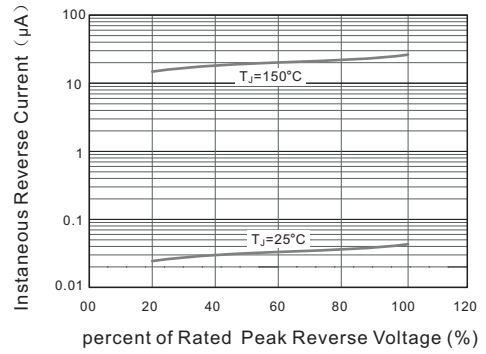


Fig.3 Typical Instantaneous Forward Characteristics

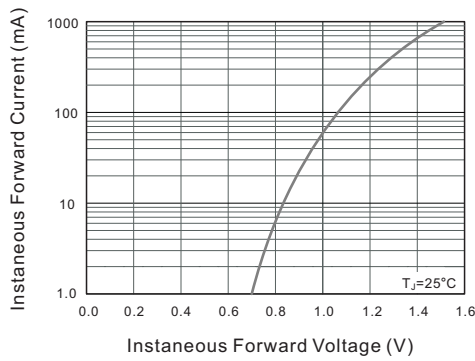
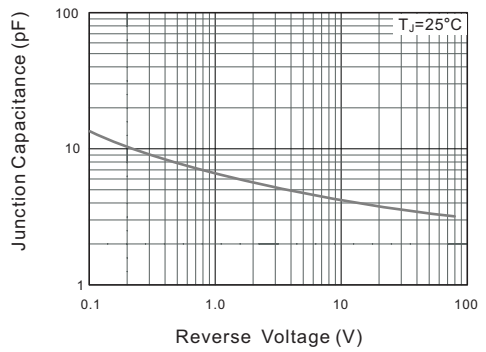


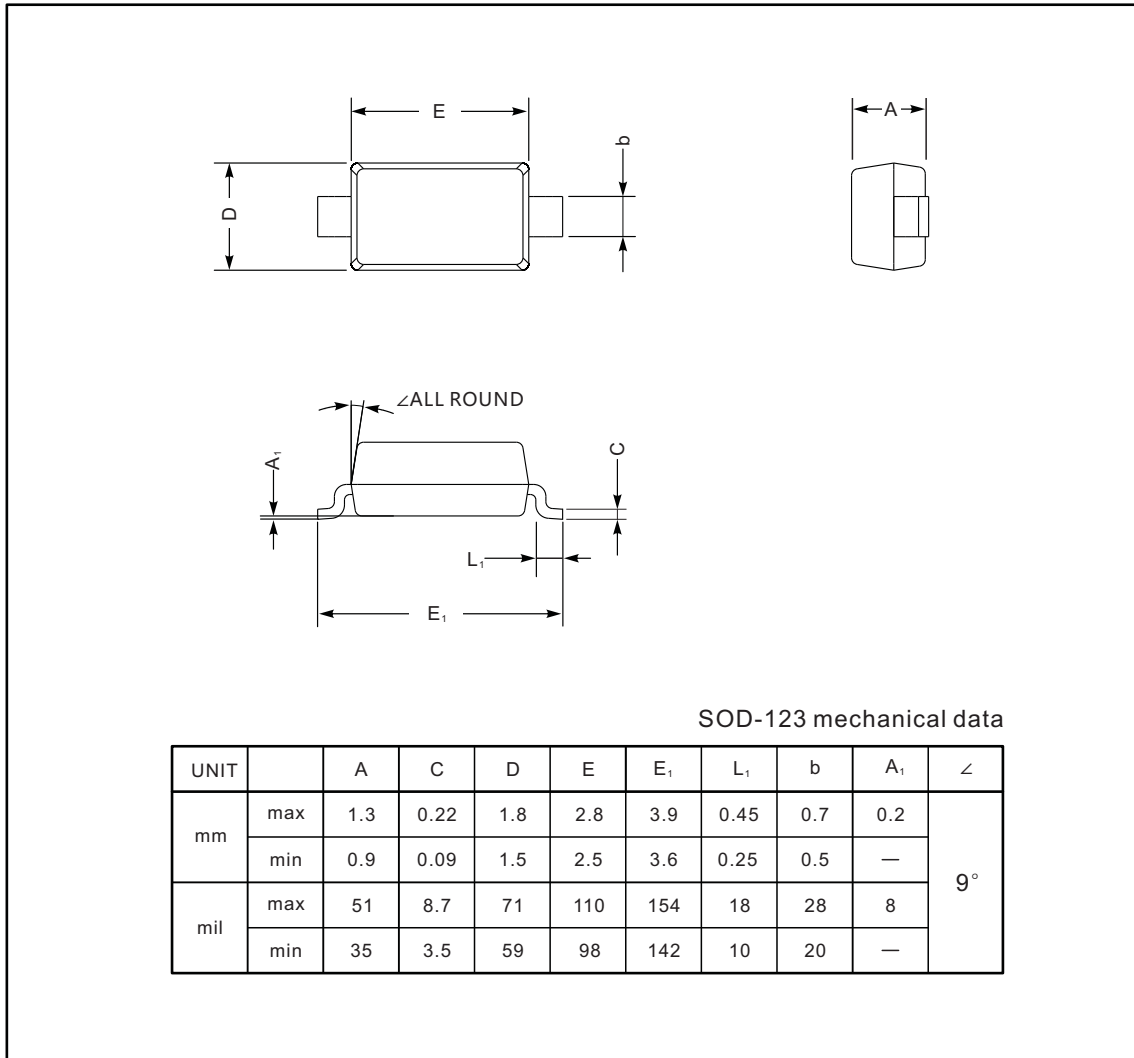
Fig.4 Typical Junction Capacitance



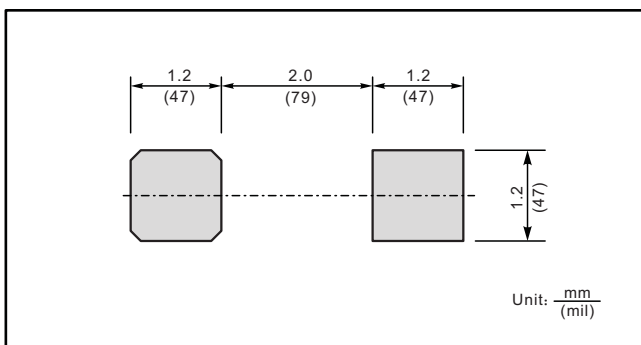
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



The recommended mounting pad size



Marking

Type number	Marking code
1N4148W	T4