



LED lights dedicated high-speed switching diode

FEATURES

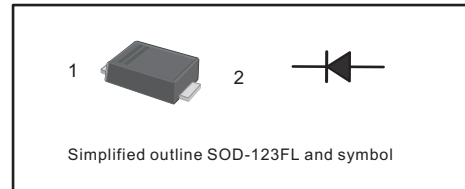
- For surface mounted applications
- Glass Passivated Chip Junction
- Fast reverse recovery time
- Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: SOD-123FL
- Approx. Weight:15mg 0.00053oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings at 25 °C

Parameter	Symbols	1N4148WL	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
Typical Thermal Resistance ⁽¹⁾	$R_{\theta JA}$	450	°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

(1) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Characteristics at $T_a = 25\text{ °C}$

Parameter	Symbols	1N4148WL	Units
Reverse Breakdown Voltage at $I_R=1\mu A$	$V_{(BR)R}$	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 $V_R=20V$ $T_j=25\text{ °C}$ at $V_R=75V$ $T_j=25\text{ °C}$ at $V_R=25V$ $T_j=150\text{ °C}$ at $V_R=75V$ $T_j=150\text{ °C}$	I_R	0.025 1 30 50	μA
Typical Junction Capacitance $f=1MHz, V_R=4V$	C_j	5	pF
Maximum Reverse Recovery Time	t_{rr} Typical	8	ns



Fig.1 Power Derating Curve

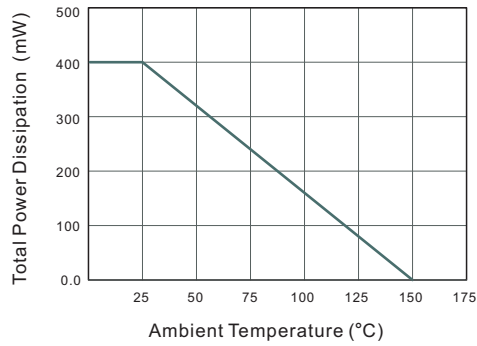


Fig.2 Typical Reverse Characteristics

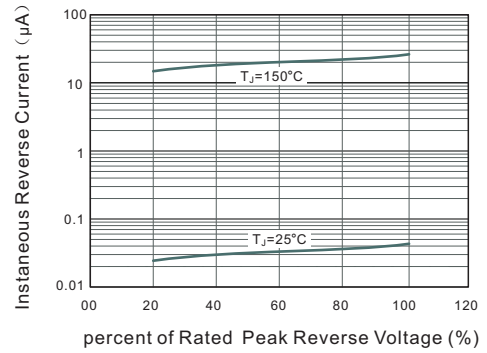


Fig.3 Typical Instantaneous Forward Characteristics

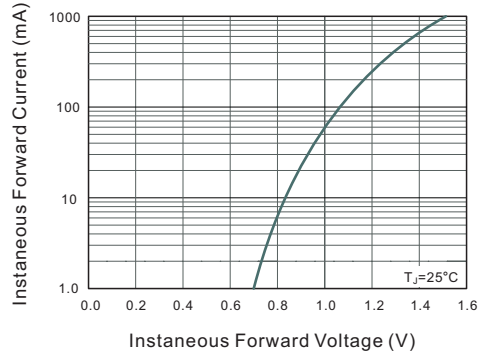
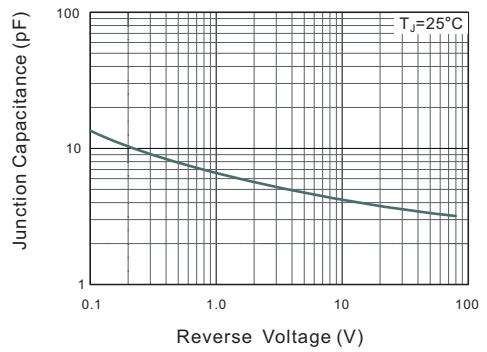


Fig.4 Typical Junction Capacitance

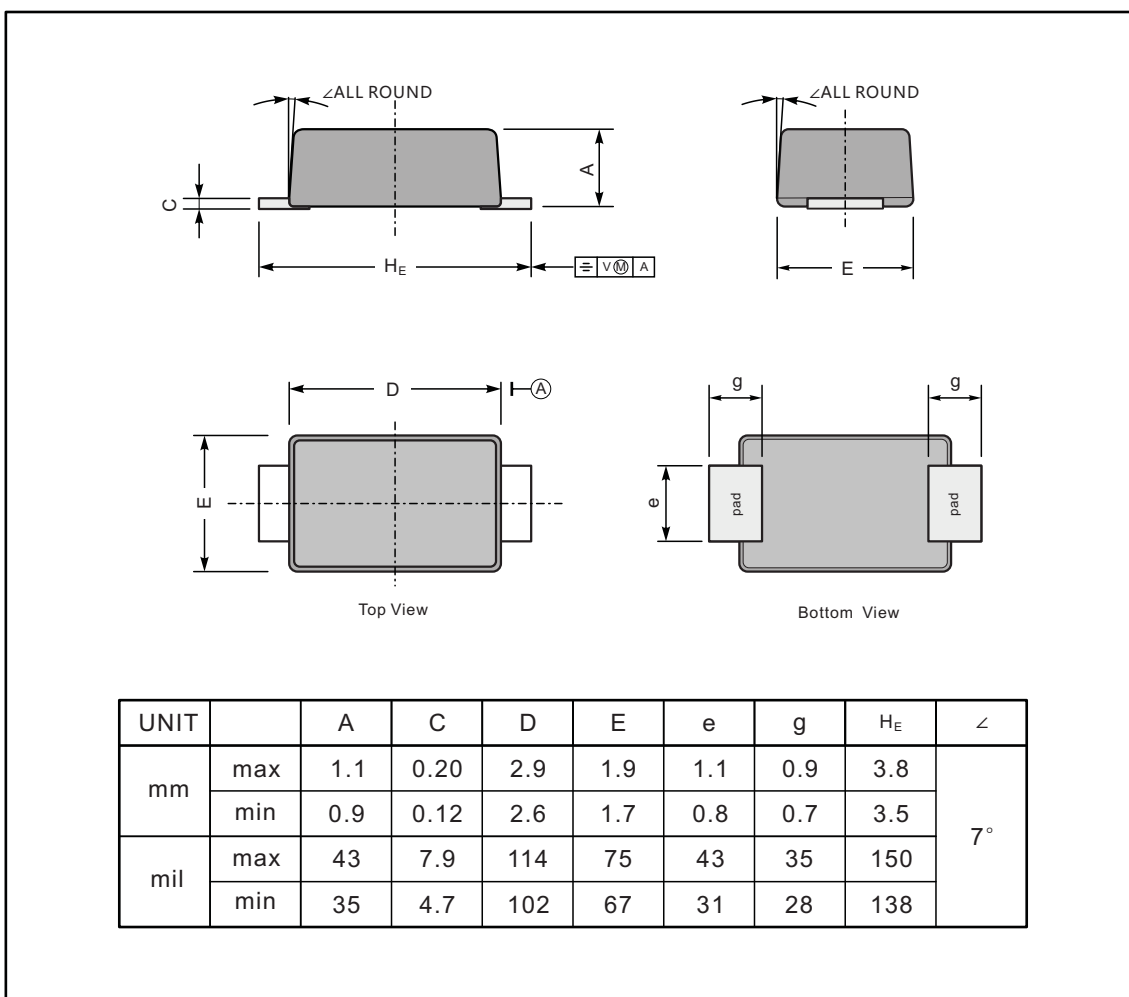




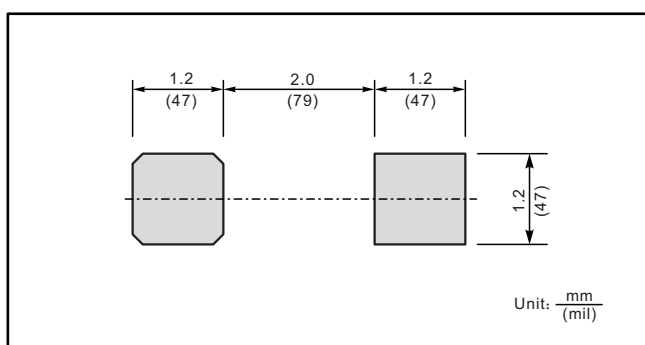
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123FL



The recommended mounting pad size



Marking

Type number	Marking code
1N4148WL	T4