

FAST SWITCHING DIODES

LED lights dedicated high-speed switching diode

FEATURES

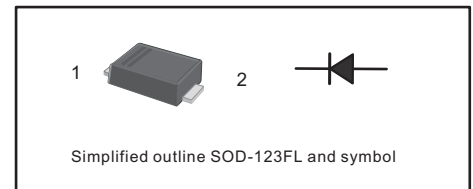
- For surface mounted applications
- Glass Passivated Chip Junction
- Fast reverse recovery time
- Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives

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
Rectified current (Average) Half Wave Rectification with Resist. Load at $T_{amb} = 25\text{ °C}$ and $f \geq 50\text{ Hz}$	I_o	150	mA
Non-reptitive Peak Forward Surge Current at 1ms	I_{FSM}	4	A
Total Power Dissipation	P_{tot}	400	mW
Thermal Resistance Junction to Ambient Air	R_{thJA}	0.45	°C/mW
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

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

Parameter	Symbols	1N4148WL	Units
Reverse Breakdown Voltage at $I_R = 1\mu\text{A}$	$V_{(BR)R}$	75	V
Maximum Forward Voltage at 1 m A at 10 m A at 50 m A at 150 m A	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}	8	ns

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RATINGS AND CHARACTERISTIC CURVES 1N4148WL

Fig.1 Forward Current Derating Curve

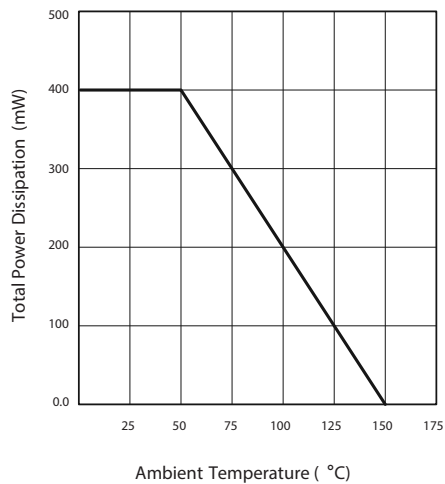


Fig.2 Typical Reverse Characteristics

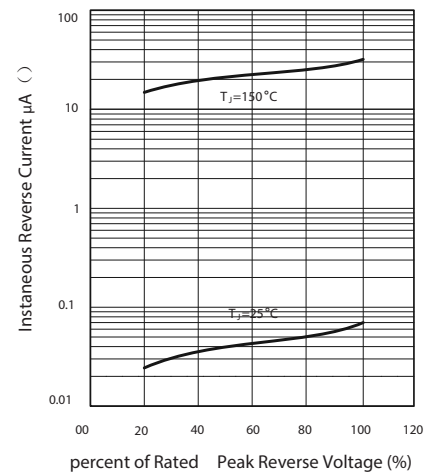


Fig.3 Typical Instantaneous Forward C characteristics

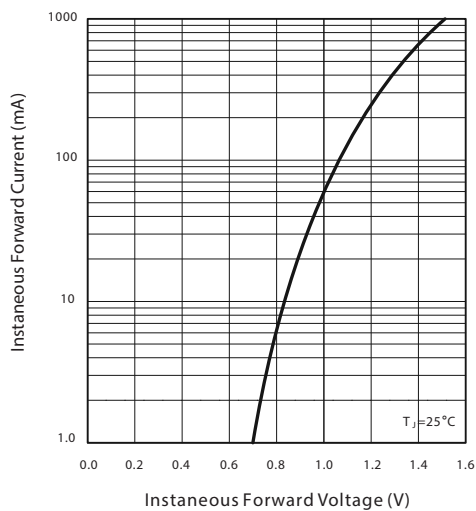
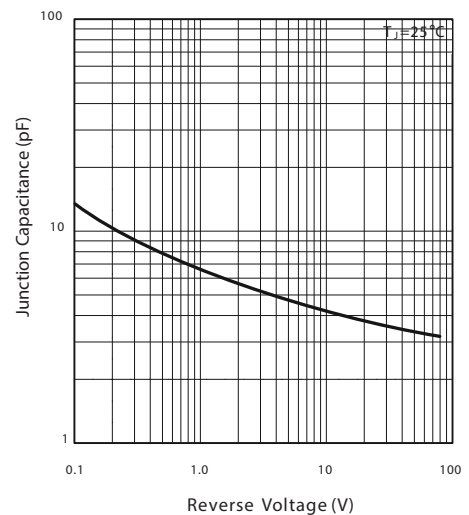


Fig.4 Typical Junction Capacitance

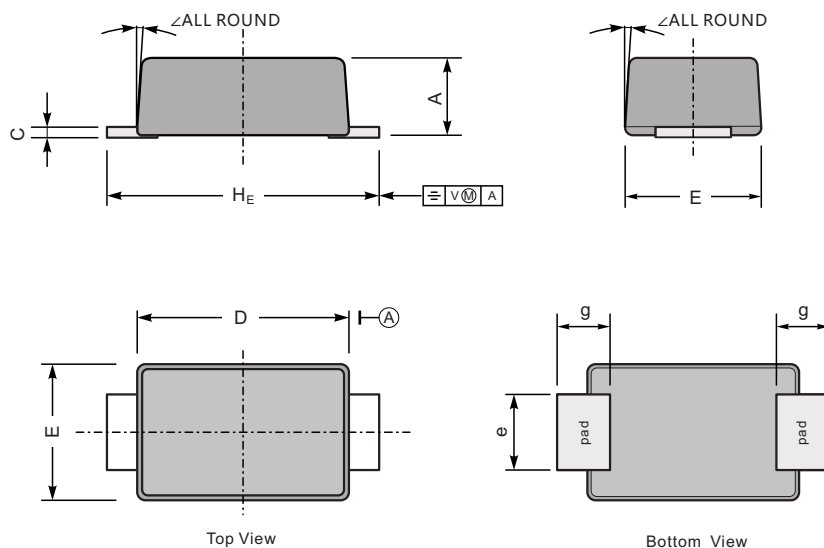


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PACKAGE OUTLINE

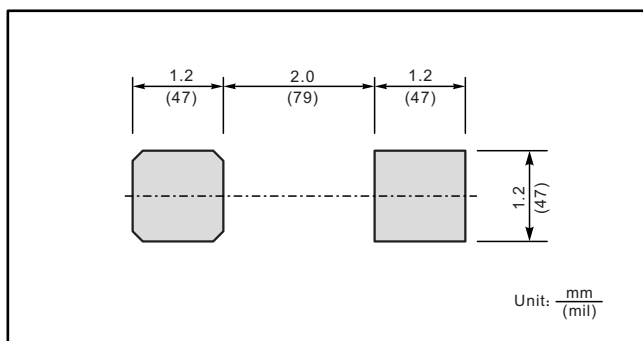
Plastic surface mounted package; 2 leads

SOD-123FL



UNIT		A	C	D	E	e	g	H _E	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	

The recommended mounting pad size



Marking

Type number	Marking code
1N4148WL	W1 / W1L

Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.