

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-323FL
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 4.5mg / 0.00016oz

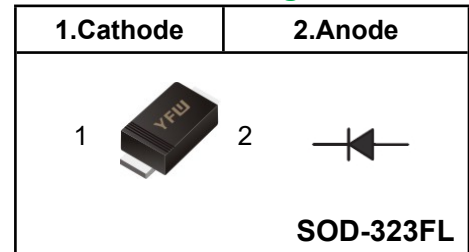
### Absolute Maximum Ratings at 25 °C

Parameter	Symbols	1N4148WSL	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	1N4148WSL	Units
Reverse Breakdown Voltage at $I_R = 1\mu A$	$V_{(BR)R}$	75	V
Maximum Forward Voltage	$V_F$	at 1 mA	0.715
		at 10 mA	0.855
		at 50 mA	1.00
		at 150 mA	1.25
Peak Reverse Current	$I_R$	at $V_R = 20V, T_j = 25\text{ °C}$	0.025
		at $V_R = 75V, T_j = 25\text{ °C}$	1
		at $V_R = 25V, T_j = 150\text{ °C}$	30
		at $V_R = 75V, T_j = 150\text{ °C}$	50
Typical Junction Capacitance $f = 1MHz, V_R = 4V$	$C_j$	5	pF
Maximum Reverse Recovery Time	$T_{rr}$ Typical	8	nS

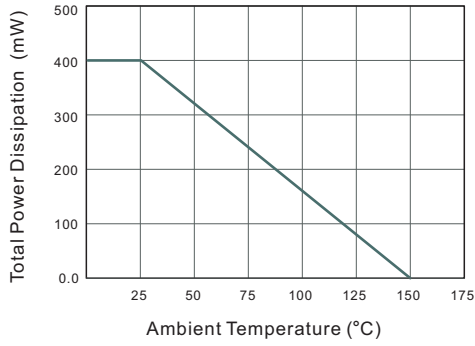
## Pinning



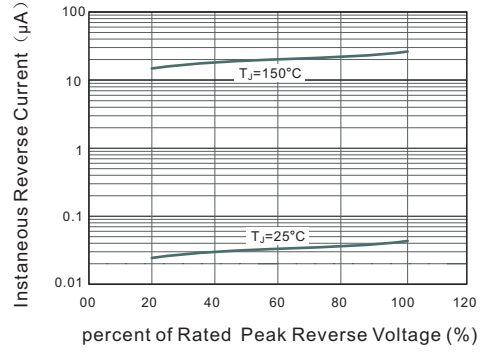
## Marking Code

1N4148WSL	T4
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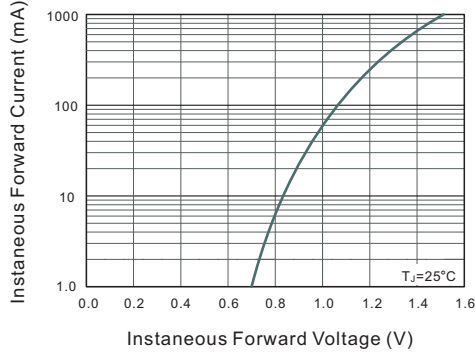
**Fig.1 Power Derating Curve**



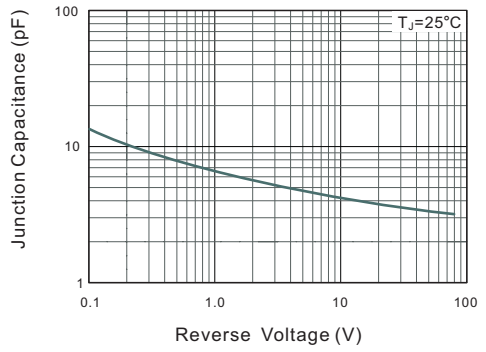
**Fig.2 Typical Reverse Characteristics**



**Fig.3 Typical Instantaneous Forward Characteristics**

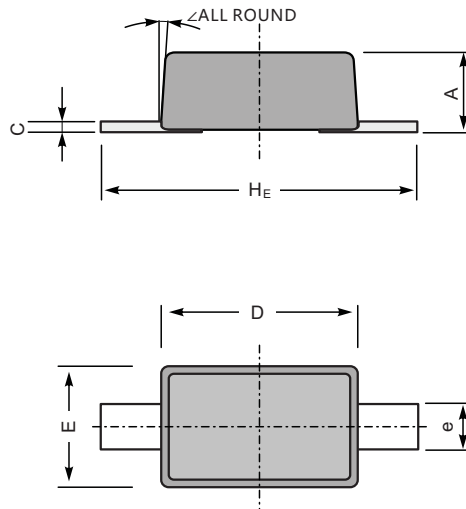


**Fig.4 Typical Junction Capacitance**



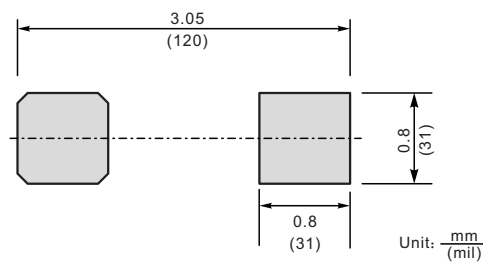
**Package Outline SOD-323FL**

Plastic surface mounted package; 2 leads



UNIT		A	C	D	E	e	H <sub>E</sub>	$\angle$
mm	max	1.0	0.25	1.8	1.35	0.4	2.7	8°
	min	0.8	0.05	1.6	1.15	0.25	2.3	
mil	max	39	9.8	71	53	18	106	
	min	31	2.0	63	45	10	91	

**The recommended mounting pad size**



**Summary of Packing Options**

Package	Packing Description	Packing Quantity	Industry Standard
SOD-323FL	Tape/Reel, 7" reel	3000	EIA-481-1