

■ Switching Diodes

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

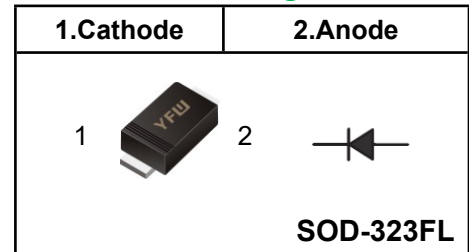
Absolute Maximum Ratings at 25 °C

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	150	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	at 1s	0.5
		at 1ms	1
		at 1us	4
Total Power Dissipation	P_{tot}	400	mA
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

Characteristics at $T_a = 25 °C$

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 $V_R=20V T_j=25°C$	0.025
		at $V_R=75V T_j=25°C$	1
		at $V_R=25V T_j=150°C$	30
		at $V_R=75V T_j=150°C$	50
Typical Junction Capacitance $f=1MHz, V_R=4V$	C_j	2	pF
Maximum Reverse Recovery Time	T_{rr} Typical	4	nS

Pinning



Marking Code

1N4148WSL	T4
-----------	----

Fig.1 Power Derating Curve

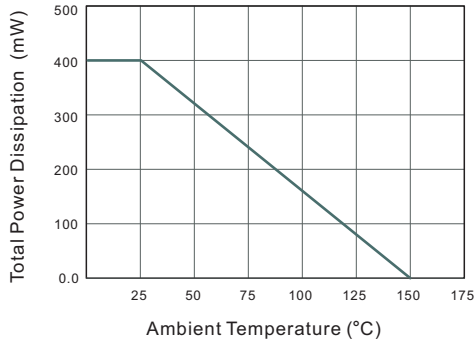


Fig.2 Typical Reverse Characteristics

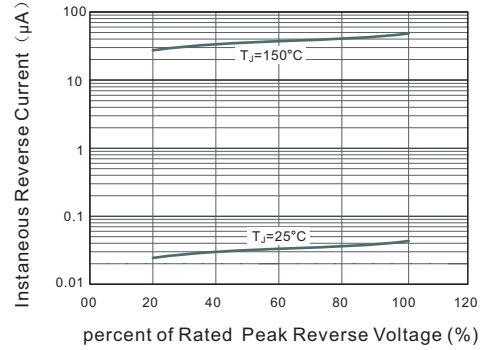


Fig.3 Typical Instantaneous Forward Characteristics

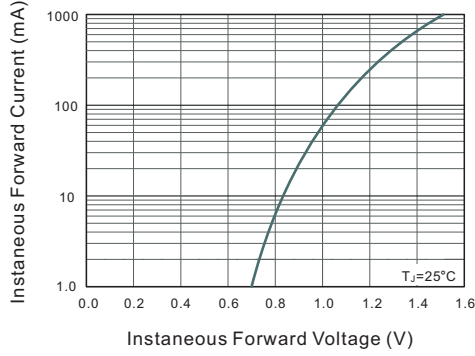
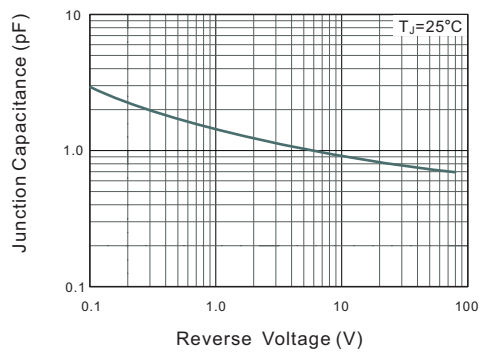
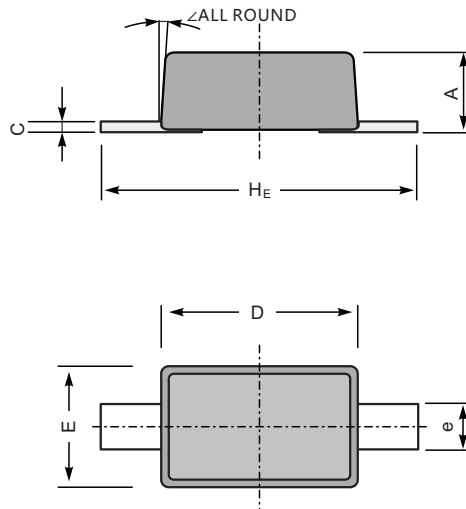


Fig.4 Typical Junction Capacitance



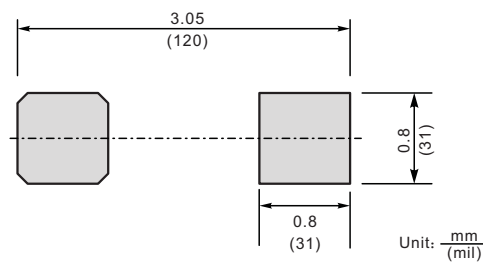
Package Outline SOD-323FL

Plastic surface mounted package; 2 leads



UNIT		A	C	D	E	e	H _E	∠
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