



### FEATURES

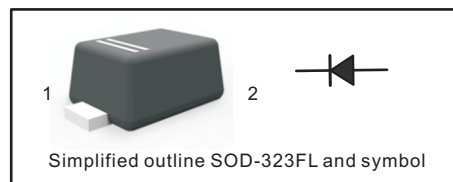
- For surface mounted applications
- Glass Passivated Chip Junction
- Fast reverse recovery time
- Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives

### MECHANICAL DATA

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

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### 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 $I_R = 1\mu\text{A}$	$V_{(BR)R}$	75	V
Maximum Forward Voltage at 1 mA at 10 mA at 50 mA at 150 mA	$V_F$	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	$\mu\text{A}$
Typical Junction Capacitance $f = 1\text{MHz}, V_R = 4\text{V}$	$C_j$	5	pF
Maximum Reverse Recovery Time <sup>(1)</sup>	$t_{rr}$ 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

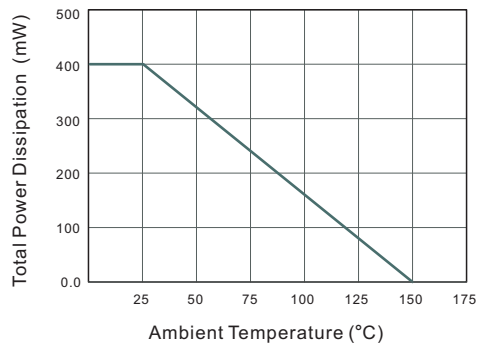


Fig.2 Typical Reverse Characteristics

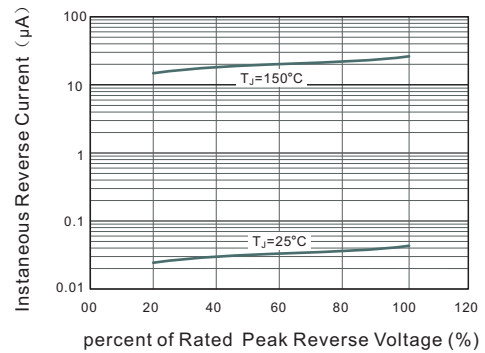


Fig.3 Typical Instantaneous Forward Characteristics

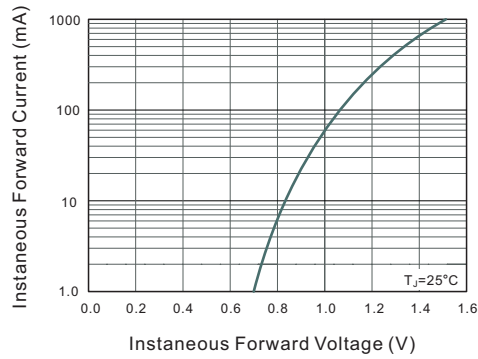
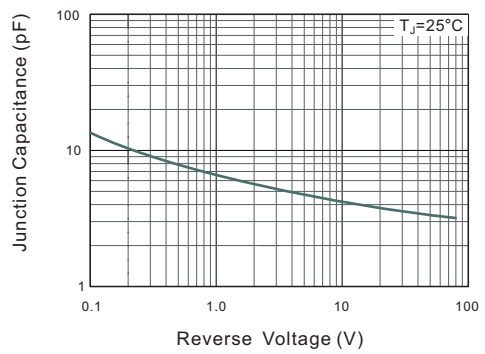


Fig.4 Typical Junction Capacitance

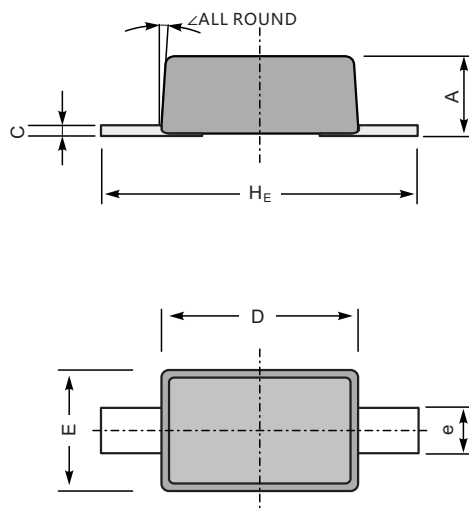




## PACKAGE OUTLINE

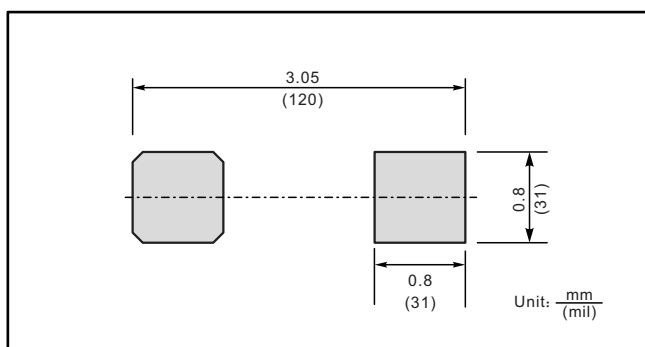
Plastic surface mounted package; 2 leads

SOD-323FL



UNIT		A	C	D	E	e	$H_E$	$\angle$
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



### Marking

Type number	Marking code
1N4148WSL	T4