

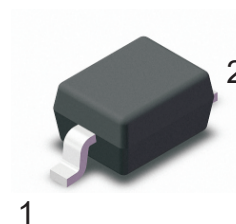


1N4148WS

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

SOD-323



1.Cathode 2. Anode

Absolute Maximum Ratings at 25 °C

Parameter	Symbols	1N4148WS	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-repetitive 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 $T_a = 25^\circ\text{C}$

Parameter	Symbols	1N4148WS	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 $V_R=20\text{V}$ $T_j=25^\circ\text{C}$ at $V_R=75\text{V}$ $T_j=25^\circ\text{C}$ at $V_R=25\text{V}$ $T_j=150^\circ\text{C}$ at $V_R=75\text{V}$ $T_j=150^\circ\text{C}$	I_R	0.025 1 30 50	μA
Typical Junction Capacitance	C_j	5	pF
Maximum Reverse Recovery Time	t_{rr} Typical	8	ns

Typical Characteristics

Fig.1 Forward Current Derating Curve

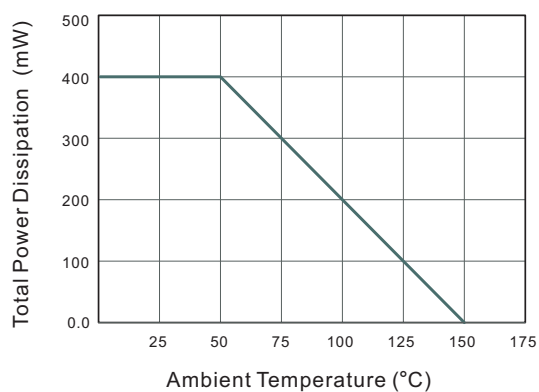


Fig.2 Typical Reverse Characteristics

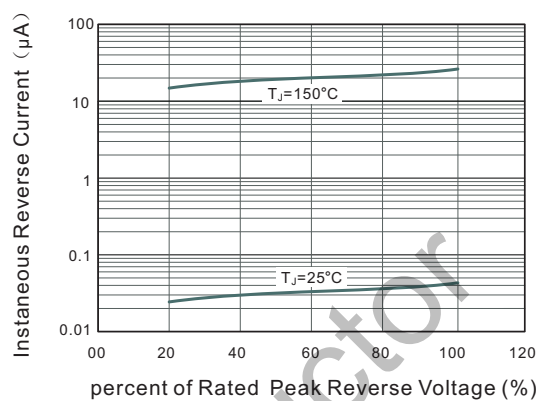


Fig.3 Typical Instaneous Forward Characteristics

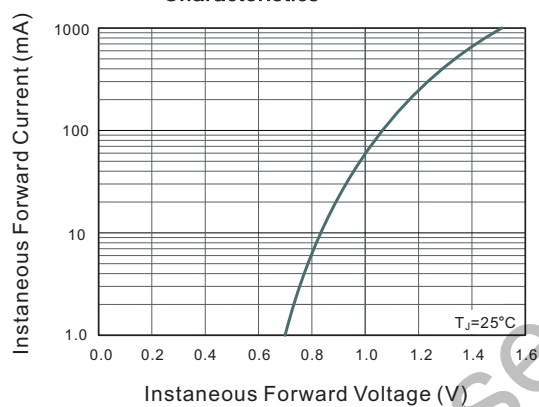
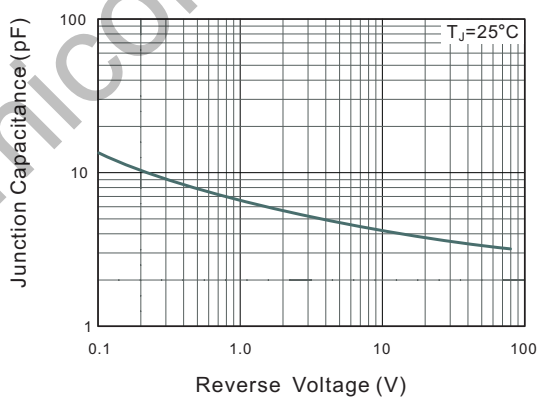
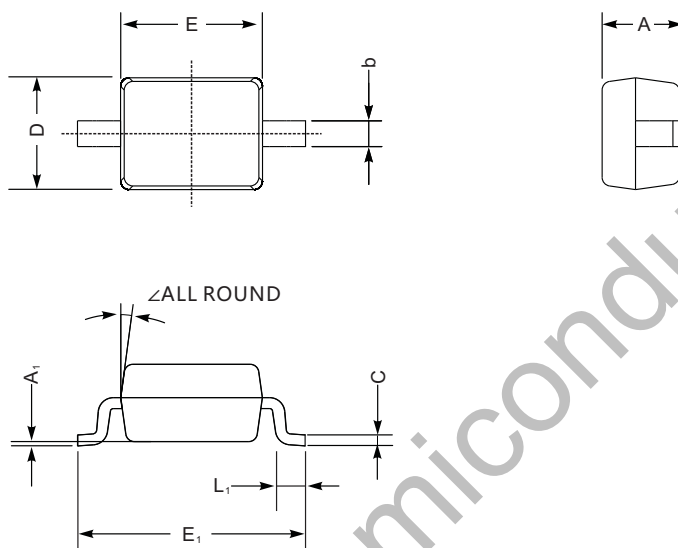


Fig.4 Typical Junction Capacitance

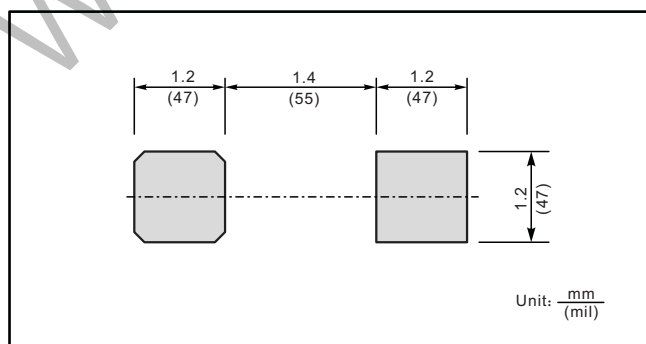


Package Dimension**SOD-323**

Unit: mm

**SOD-323 mechanical data**

UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

The recommended mounting pad size**Marking**

Type number	Marking code
1N4148WS	T4