1N4148WS

SILICON EPITAXIAL PLANAR SWITCHING DIODE

Forward Current-300mA Reverse Voltage-100V

FEATURES

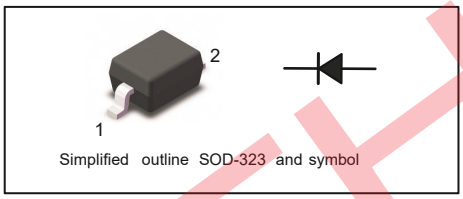
- **For surface mounted applications**
- **Glass Passivated Chip Junction**
- **Fast reverse recovery time**
- **Ideal for automated placement**
- **Lead free in comply with EU RoHS 2011/65/EU directives**

MECHANICAL DATA

- **Case: SOD-323**
- **Terminals: Solderable per MIL-STD-750, Method 2026**

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Simplified outline SOD-323 and symbol

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-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 Ta = 25 °C)

Parameter		Symbols	1N4148WS	Units
Reverse BreakdownVoltage	at I_R=1μA	$V_{(BR)R}$	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=20V T_J=25°C at V_R=75V T_J=25°C at V_R=25V T_J=150°C at V_R=75V T_J=150°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

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

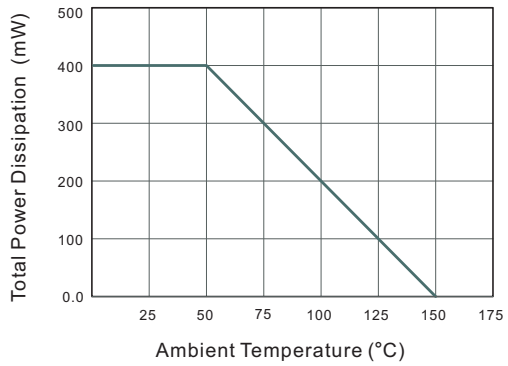


Fig.2 Typical Reverse Characteristics

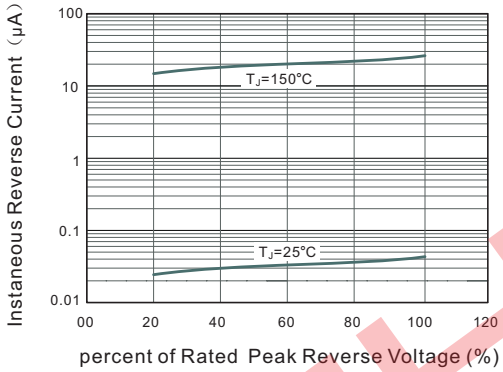


Fig.3 Typical Instaneous Forward Characteristics

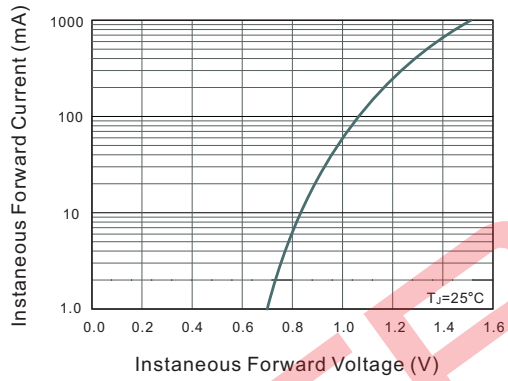
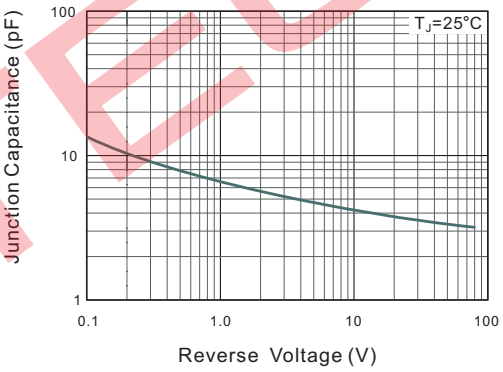


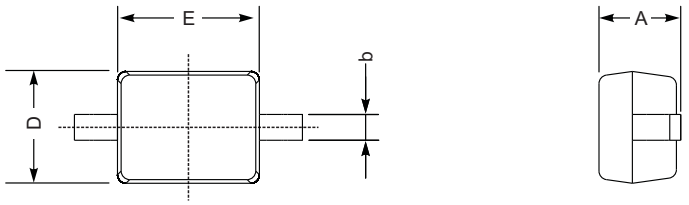
Fig.4 Typical Junction Capacitance

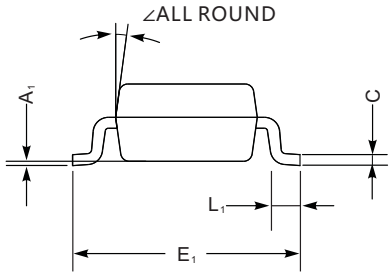


1N4148WS

PACKAGE OUTLINE

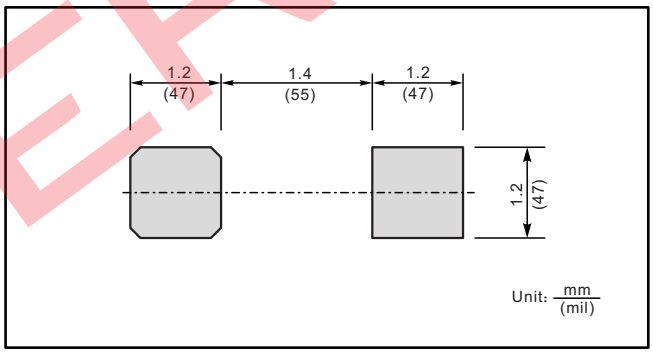
SOD-323





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



ORDER INFORMATION

Device	Package	Shipping
1N4148WS	SOD-323	3000PCS/Reel&Tape(7inch)