

1N4148W

SILICON EPITAXIAL PLANAR SWITCHING DIODE

Forward Current-300mA Reverse Voltage-100V

FEATURES

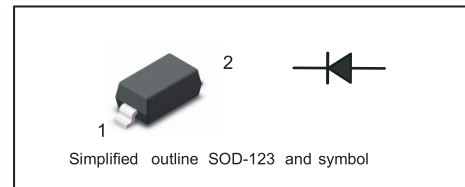
- ◆ For surface mounted applications
- ◆ Glass Passivated Chip Junction
- ◆ Fast reverse recovery time
- ◆ Ideal for automated placement
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

MECHANICAL DATA

- ◆ Case: SOD-123
- ◆ Terminals: Solderable per MIL-STD-750, Method
- ◆ Approx. Weight: 16mg



ABSOLUTE MAXIMUM RATINGS (at Ta=25 °C)

Parameter	Symbols	1N4148W	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 Ta = 25 °C)

Parameter	Symbols	1N4148W	Units
Reverse Breakdown Voltage at $I_R=1\mu A$	$V_{(BR)R}$	75	V
Maximum Forward Voltage at 1mA at 10mA at 50mA at 150mA	V_F	0.715 0.855 1.00 1.25	V
Peak Reverse Current at $V_R=20V$ $T_J=25^\circ C$ at $V_R=75V$ $T_J=25^\circ C$ at $V_R=25V$ $T_J=150^\circ C$ at $V_R=75V$ $T_J=150^\circ C$	I_R	0.025 1 30 50	μA
Typical Junction Capacitance	C_J	5	pF
Maximum Reverse Recovery Time	t_{rr} Typical	8	ns

Dated:06/2017
Rev: 1.0

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

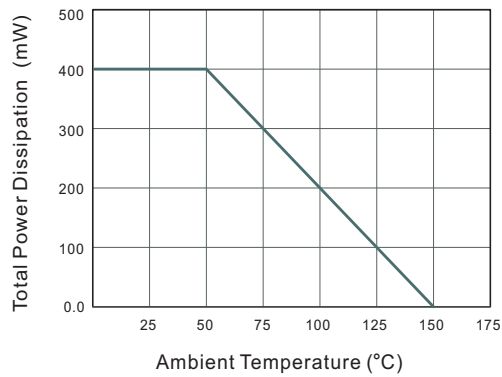


Fig.2 Typical Reverse Characteristics

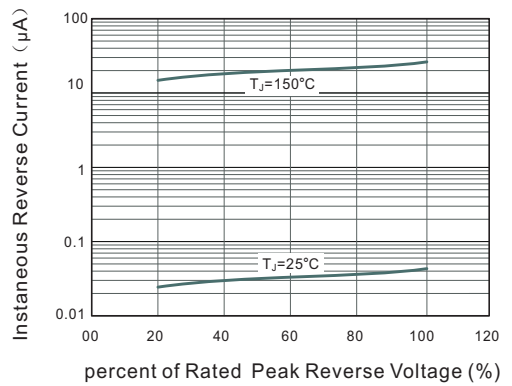


Fig.3 Typical Instantaneous Forward Characteristics

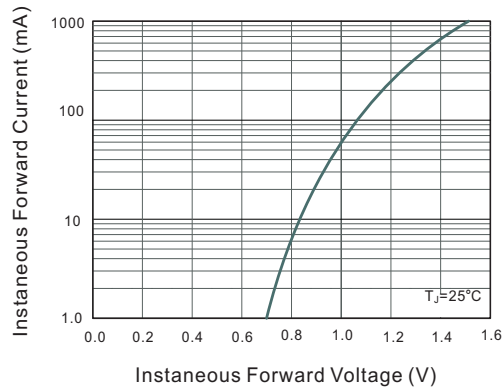
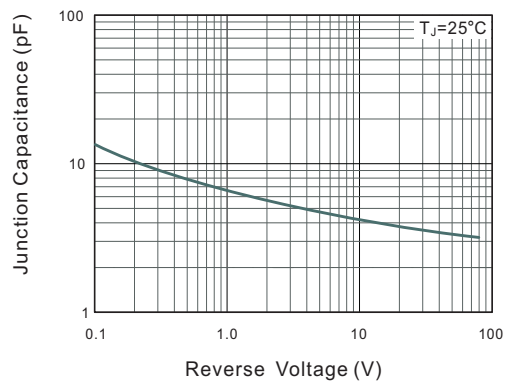


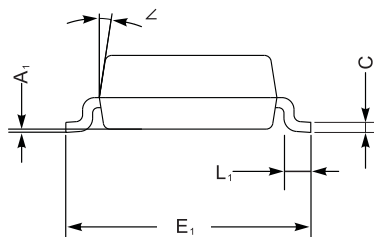
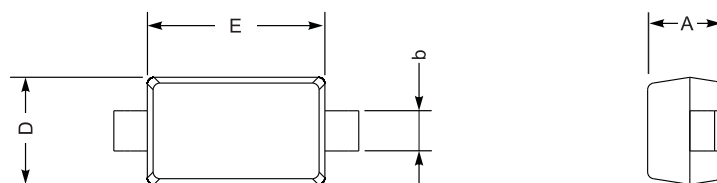
Fig.4 Typical Junction Capacitance



1N4148W

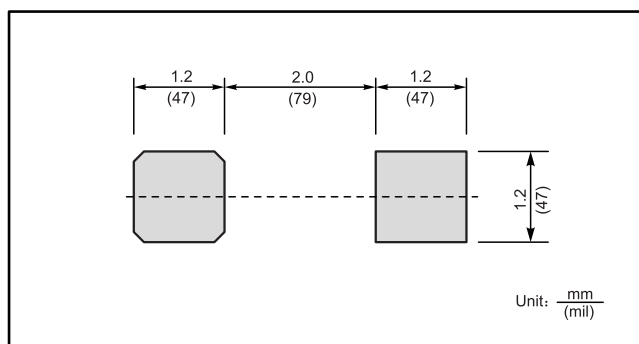
PACKAGE OUTLINE

SOD-123



UNIT		A	C	D	E	E ₁	L ₁	b	A ₁	∠
mm	max	1.3	0.22	1.8	2.8	3.9	0.45	0.7	0.2	9°
	min	0.9	0.09	1.5	2.5	3.6	0.25	0.5	—	
mil	max	51	8.7	71	110	154	18	28	8	
	min	35	3.5	59	98	142	10	20	—	

THE RECOMMENDED MOUNTING PAD SIZE



ORDER INFORMATION

Device	Package	Shipping
1N4148W	SOD-123	3000PCS/Reel&Tape(7inch)