

## Features

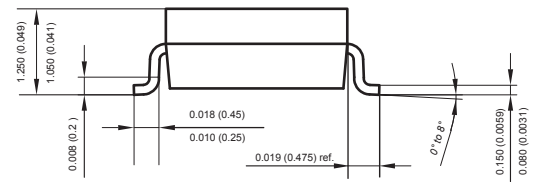
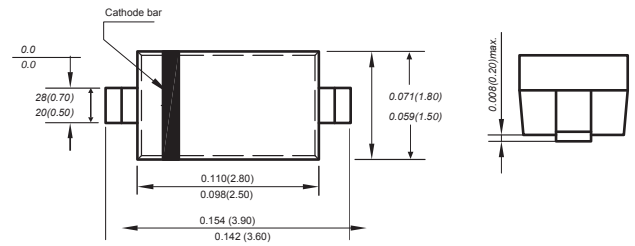
1. For surface mounted applications
2. Glass Passivated Chip Junction
3. Fast reverse recovery time
4. Ideal for automated placement
5. Lead free in comply with EU RoHS 2011/65/EU directives

**SOD-123**

 RoHS  
COMPLIANT

## Mechanical Data

1. Case : JEDEC SOD-123FL molded plastic body
2. Terminals : Solderable per MIL-STD-750, Method 2026
3. Polarity : Color band denotes cathode end
4. Mounting Position : Any
5. Weight : 0.0007 ounce, 0.02 grams
6. Marking: T4



Dimensions in inches and (millimeters)

## Absolute Maximum Ratings at 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	$I_{FSM}$	2	A
Total Power Dissipation	$P_{tot}$	400	mW
Typical Thermal Resistance <sup>(1)</sup>	$R_{\theta JA}$	250	°C/W
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150	°C

(1) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

## 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 1 mA at 10 mA at 50 mA at 150 mA at 300 mA	$V_F$	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	$\mu A$
Typical Junction Capacitance	$C_j$	5	pF
Maximum Reverse Recovery Time	$t_{rr}$ Typical	4	ns

### Typical Characteristics

Fig.1 Forward Current Derating Curve

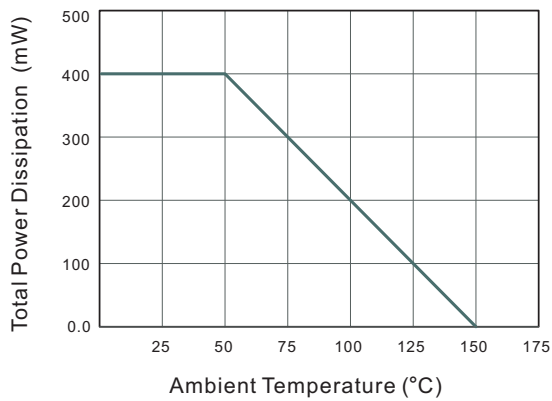


Fig.2 Typical Reverse Characteristics

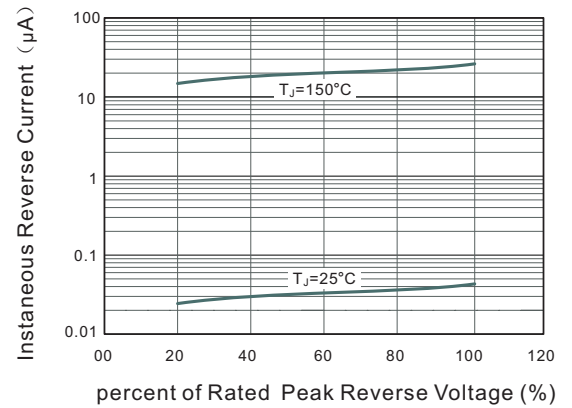


Fig.3 Typical Instantaneous Forward Characteristics

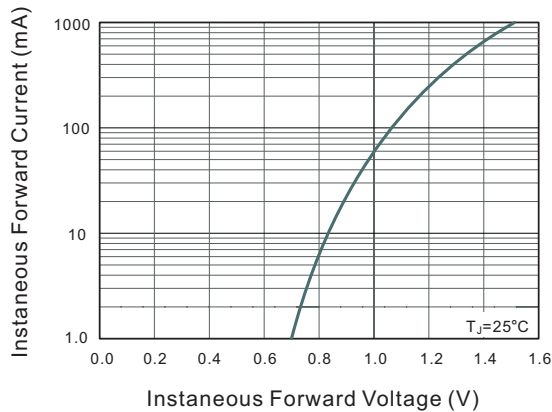
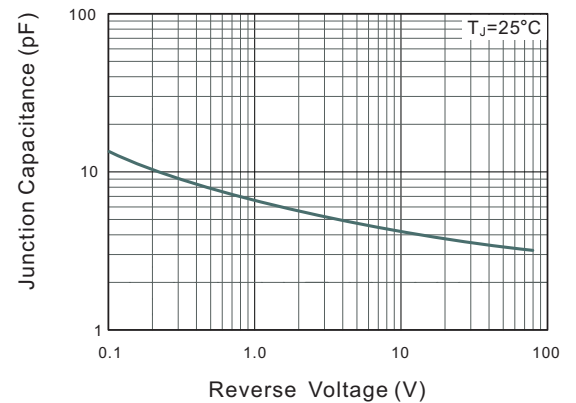
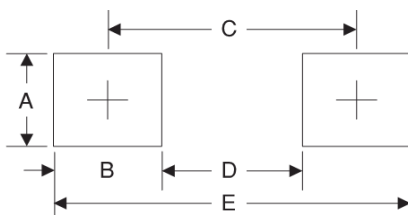


Fig.4 Typical Junction Capacitance



### Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	1.2	0.047
B	1.2	0.047
C	3.2	0.126
D	2	0.079
E	4.4	0.173

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