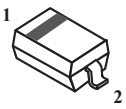
SURFACE MOUNT SWITCHING DIODE

L1N4148WT1G
S-L1N4148WT1G



SOD-123

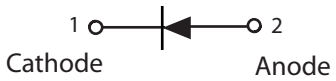
●FEATURES

1)Fast Switching Speed
2)Surface Mount Package Ideally Suited for Automatic Insertion
3)For General Purpose Switching Applications
4)High Conductance
5)We declare that the material of product compliant with RoHS requirements and Halogen Free.
6)S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q 101 Qualified and PPAP Capable.

●MECHANICAL DATA

1)Case: SOD-123, Molded Plastic
2)Terminals: Solderable per MIL-STD-202,Method 208
3)Polarity: Cathode Band
4)Marking: Type Code only or Date Code and Type Code
Type Code: T4
5)Weight: 11.67mg

Equivalent Circuit Diagram



●MAXIMUM RATINGS(Ta = 25℃)

Characteristic	Symbol	Limits	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Repetitive Peak Forward Current (Note 1)	I_{FM}	300	mA
Average Rectified Output Current (Note 1)	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @ t =1.0 μs	I_{FSM}	2	A
@ t =1.0 s		1	
Power Dissipation (Note 1)	P_D	425	mW
Thermal Resistance Junction to Ambient Air (Note 1)	$R_{\theta JA}$	290	°C/W
Operating and Storage Temperature Range	Tj , T_{STG}	-65 to +150	°C

●ELECTRICAL CHARACTERISTICS (Ta= 25℃)

Characteristic	Symbol	Min.	Max.	Unit	Test Conditon
Maximum Forward Voltage	V_{FM}	–	0.715	V	I_F = 1.0mA
			0.855		I_F = 10mA
			1		I_F = 50mA
			1.25		I_F = 150mA
Maximum Peak Reverse Current	I_{RM}	–	2.5	μA	V_R = 75V
			50	μA	V_R= 75V, Tj = 150°C
			30	μA	V_R= 25V, Tj = 150°C
			25	nA	V_R= 20V,Tj = 150°C
Junction Capacitance	Cj	–	2.0	pF	V_R = 0, f = 1.0MHz
Reverse Recovery Time	trr	–	4.0	ns	I_F = I_R = 10mA,Irr = 0.1 x I_R, R_L = 100Ω

Notes: 1. Valid provided that terminals are kept at ambient temperature

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ELECTRICAL CHARACTERISTICS CURVES

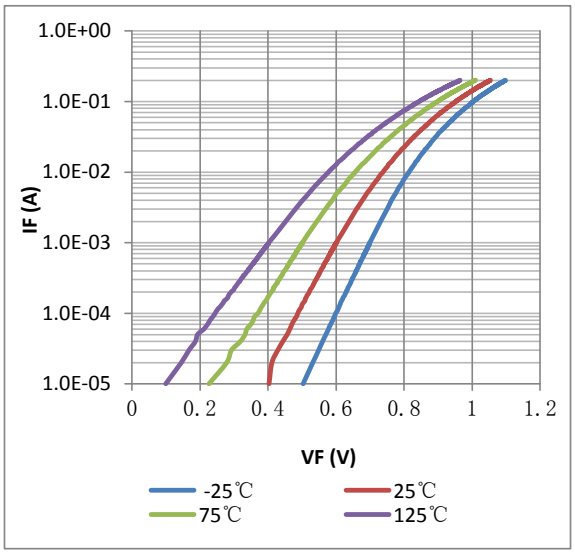

FIG. 1 Forward Characteristics

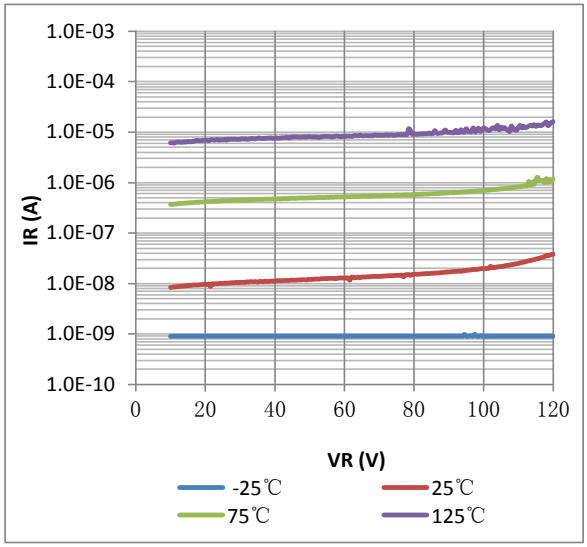

FIG. 2 Reverse Characteristics

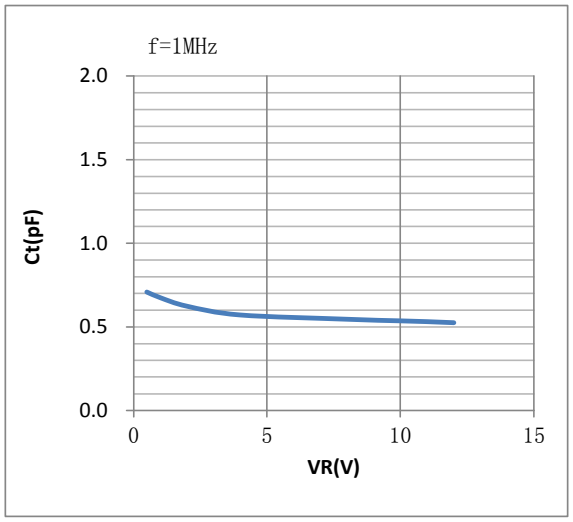

FIG. 3 Capacitance

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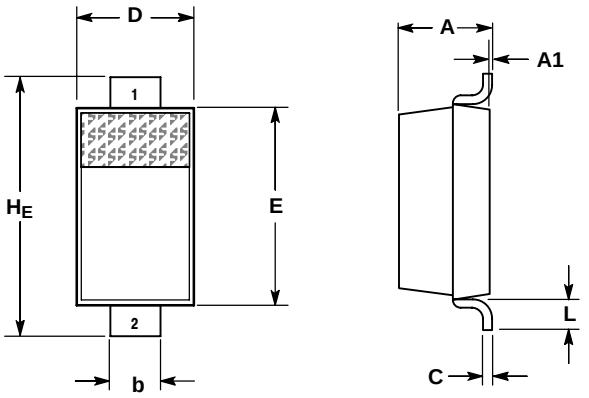
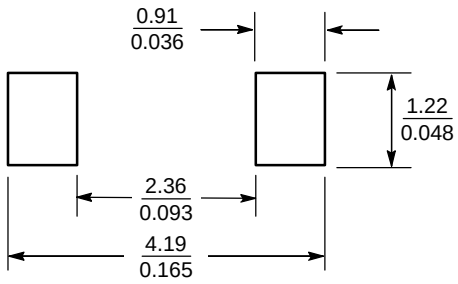


NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.

	MILLIMETERS			INCHES		
DIM	MIN	NOM	MAX	MIN	NOM	MAX
A	0.94	1.17	1.35	0.037	0.046	0.053
A1	0.00	0.05	0.10	0.000	0.002	0.004
b	0.51	0.61	0.71	0.020	0.024	0.028
c	---	---	0.15	---	---	0.006
D	1.40	1.60	1.80	0.055	0.063	0.071
E	2.54	2.69	2.84	0.100	0.106	0.112
H_E	3.56	3.68	3.86	0.140	0.145	0.152
L	0.25	---	---	0.010	---	---

STYLE 1:
PIN 1. CATHODE
2. ANODE

SOLDERING FOOTPRINT*



SCALE 10:1 $\left(\frac{mm}{inches}\right)$