

SURFACE MOUNT SWITCHING DIODE

●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

●MAXIMUM RATINGS(Ta = 25°C)

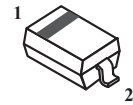
Characteristic	Symbol	Limits	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Repetitive Peak Forward Current (Note 1)	I_{FM}	300	mA
Average Rectified Output Current (Note 1)	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0 μ s @ t = 1.0 s	I_{FSM}	2	A
		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	T_j, T_{STG}	-65 to +150	°C

●ELECTRICAL CHARACTERISTICS (Ta= 25°C)

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	$V_R = 75V, T_j = 150^\circ C$
			30	μA	$V_R = 25V, T_j = 150^\circ C$
			25	nA	$V_R = 20V, T_j = 150^\circ C$
Junction Capacitance	C_j	—	2.0	pF	$V_R = 0, f = 1.0MHz$
Reverse Recovery Time	t_{rr}	—	4.0	ns	$I_F = I_R = 10mA, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$

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

L1N4148WT1G
S-L1N4148WT1G



SOD-123

Equivalent Circuit Diagram



L1N4148WT1G, S-L1N4148WT1G

ELECTRICAL CHARACTERISTICS CURVES

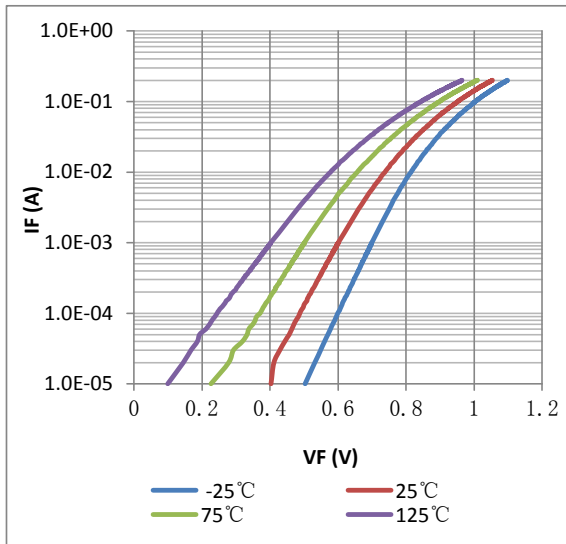


FIG. 1 Forward Characteristics

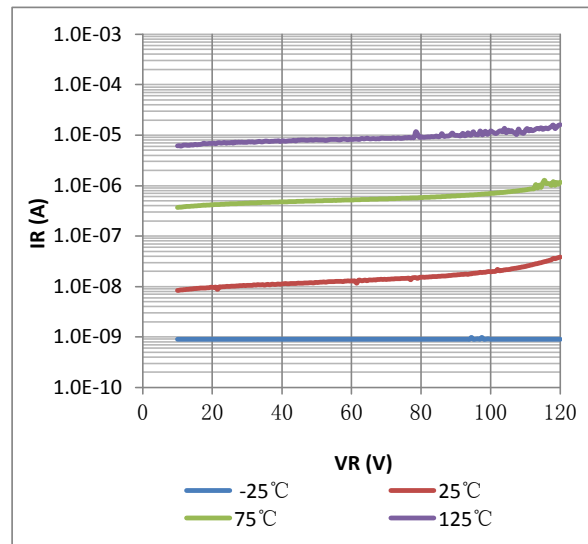


FIG. 2 Reverse Characteristics

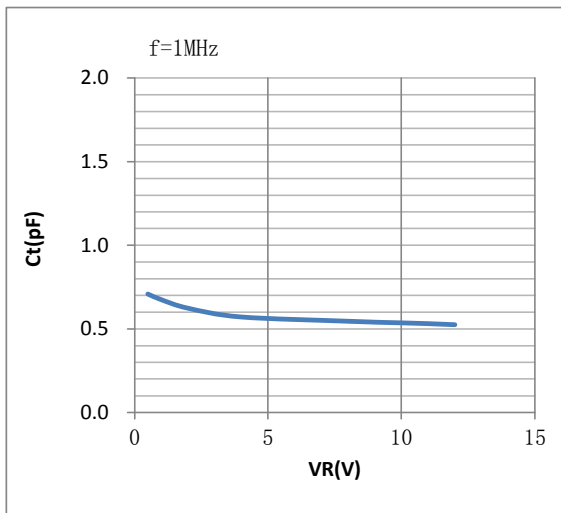
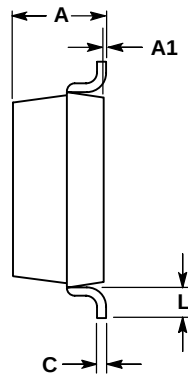
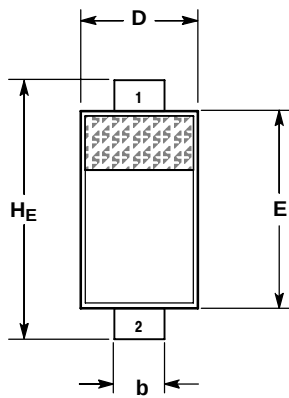


FIG. 3 Capacitance

L1N4148WT1G, S-L1N4148WT1G

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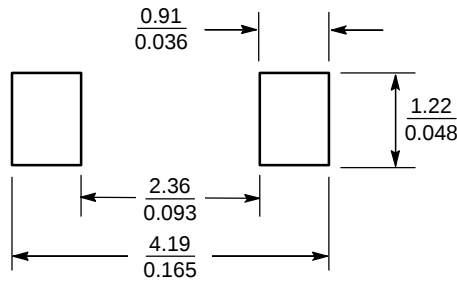


- NOTES:
 1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
 2. CONTROLLING DIMENSION: INCH.

DIM	MILLIMETERS			INCHES		
	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 (mm/inches)