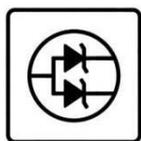


# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

**1N4148WT-MS**

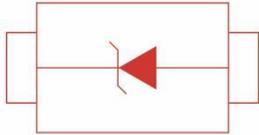
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**Product specification**

## Features

- Fast switching speed
- Ultra-small surface mount package
- For general purpose switching applications
- High conductance

## Reference News

PACKAGE OUTLINE	Anode	Marking
 <p>SOD-523</p>		

## RNNING

PIN	DESCRIPTION
1	Cathode
2	Anode

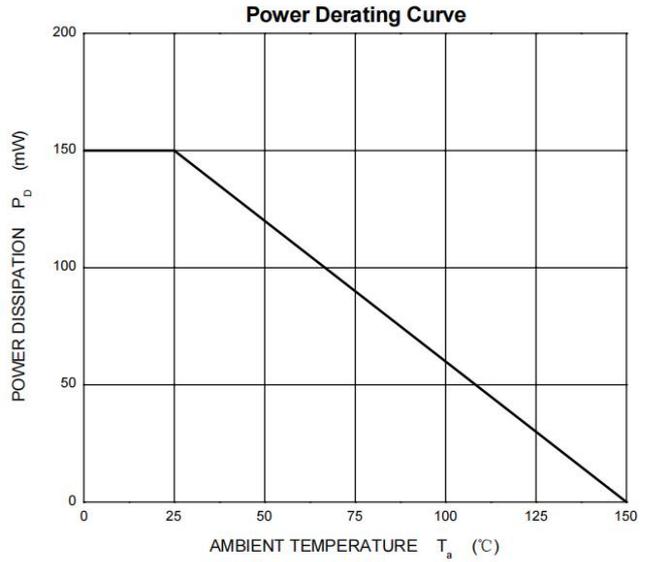
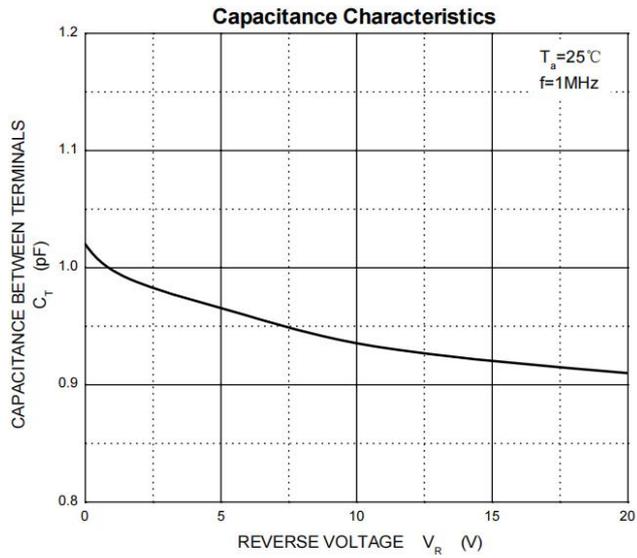
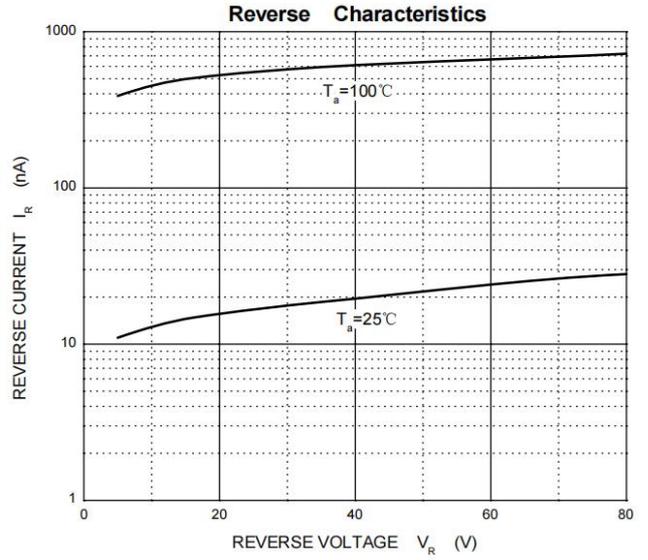
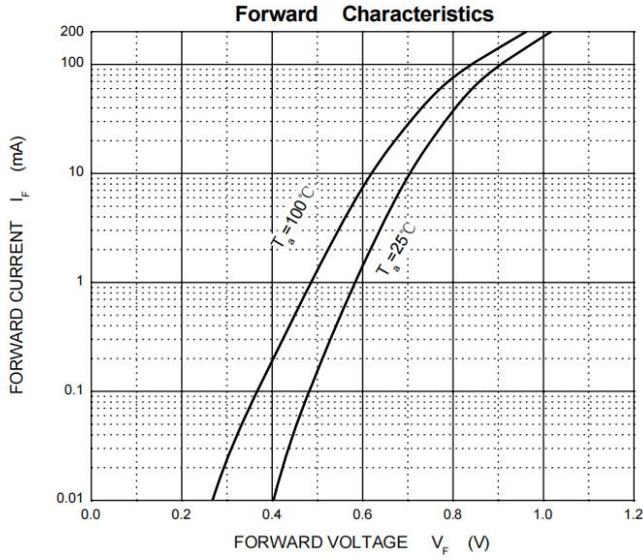
## Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Reverse Voltage	$V_R$	75	V
Average Rectified Forward Current	$I_{F(AV)}$	125	mA
Forward Continuous Current	$I_{FM}$	250	mA
Non-repetitive Peak Forward Surge Current	$I_{FSM}$	2 1	A
			at t = 1 $\mu$ s at t = 100 ms
Power Dissipation	$P_{tot}$	150	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	833	°C/W
Operating Temperature Range	$T_j$	- 65 to + 150	°C
Storage Temperature Range	$T_{stg}$	- 65 to + 150	°C

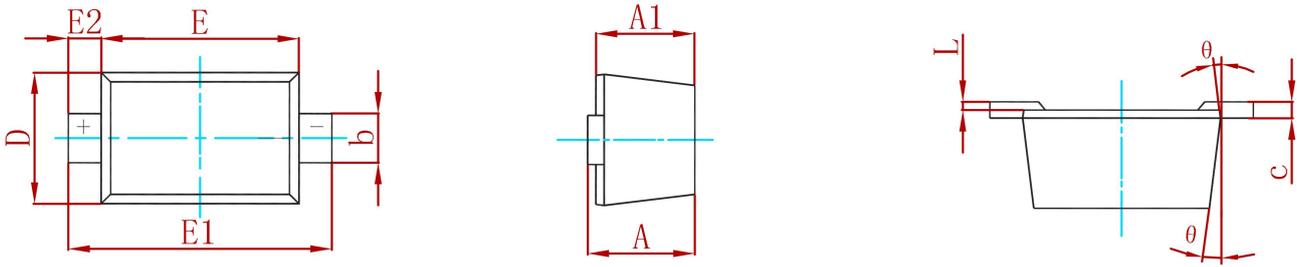
**Characteristics at Ta = 25 °C**

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 1 \mu A$	$V_{(BR)R}$	75	-	V
Forward Voltage at $I_F = 1 \text{ mA}$ at $I_F = 10 \text{ mA}$ at $I_F = 50 \text{ mA}$ at $I_F = 150 \text{ mA}$	$V_F$	- - - -	0.715 0.855 1 1.25	V
Peak Reverse Current at $V_R = 75 \text{ V}$ at $V_R = 20 \text{ V}$ at $V_R = 75 \text{ V}, T_J = 150^\circ C$ at $V_R = 25 \text{ V}, T_J = 150^\circ C$	$I_R$	- - - -	1 25 50 30	$\mu A$ nA $\mu A$ $\mu A$
Total Capacitance at $V_R = 0 \text{ V}, f = 1 \text{ MHz}$	$C_T$	-	2	F
Reverse Recovery Time at $I_{rr} = 0.1 \times I_R, I_F = I_R = 10 \text{ mA}, R_L = 100 \Omega$	$t_{rr}$	-	4	ns

**Typical Characteristics**

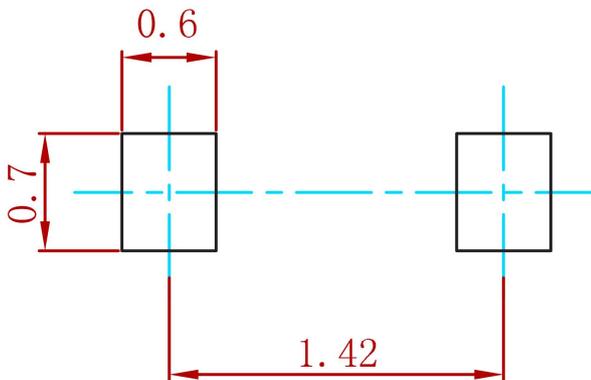


**PACKAGE MECHANICAL DATA**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
9	7° REF		7° REF	

**Suggested Pad Layout**



Note:

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.

**REEL SPECIFICATION**

P/N	PKG	QTY
1N4148WT-MS	SOD-523	3000

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