

# 1N4148WS

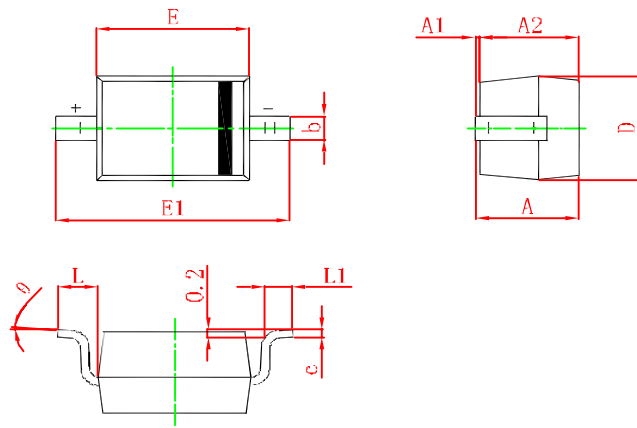
## Switching Diode

### Small Signal Product

#### FEATURES

- Surface Mounted Device
- Fast Switching Speed
- Moisture sensitivity level (MSL): 1
- Pb free and RoHS compliant

#### SOD-323 PACKAGE OUTLINE



Symbol	Min.(mm)	Max.(mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
$\theta$	0°	8°

#### MECHANICAL DATA

- Case: Bend lead SOD-323 package
- High temperature soldering guaranteed: 260°C/10s
- Marking: T4

#### Maximum Ratings and Electrical Characteristics

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Peak reverse voltage	$V_{RM}$	100	V
DC blocking voltage	$V_R$	75	V
Non-repetitive peak forward current	$I_{FM}$	300	mA
Average rectified output current	$I_O$	150	mA
Peak forward surge current @ $t=1\mu\text{s}$	$I_{FSM}$	2.0	A
Power dissipation	$P_D$	200	mW
Junction temperature	$T_J$	150	°C
Storage temperature	$T_{STG}$	- 55 to +150	°C

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Forward voltage	$V_{F1}$	$I_F = 1\text{mA}$			0.715	V
	$V_{F2}$	$I_F = 10\text{mA}$			0.885	V
	$V_{F3}$	$I_F = 50\text{mA}$			1	V
	$V_{F4}$	$I_F = 150\text{mA}$			1.25	V
Reverse leakage current	$I_{R1}$	$V_R=75\text{V}$			1	$\mu\text{A}$
	$I_{R2}$	$V_R=20\text{V}$			25	nA
Capacitance between terminals	$C_T$	$V_R=0\text{V}$ , $f=1\text{MHz}$			2	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10\text{mA}$ , $I_{rr}=0.1 \cdot I_R$ , $R_L=100\Omega$			4.0	ns

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### RATINGS AND CHARACTERISTICS CURVES

( $T_A=25^\circ\text{C}$  unless otherwise noted)

Fig. 1 Typical Reverse Characteristics

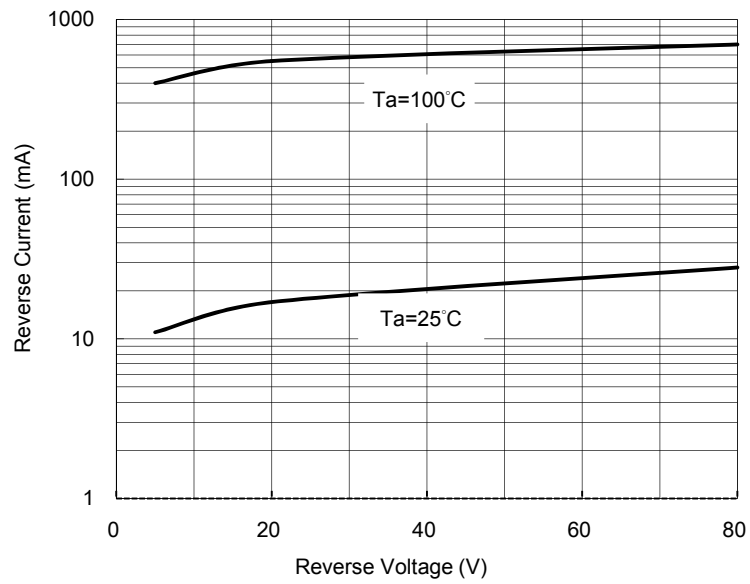


Fig.2 Typical Forward Characteristics

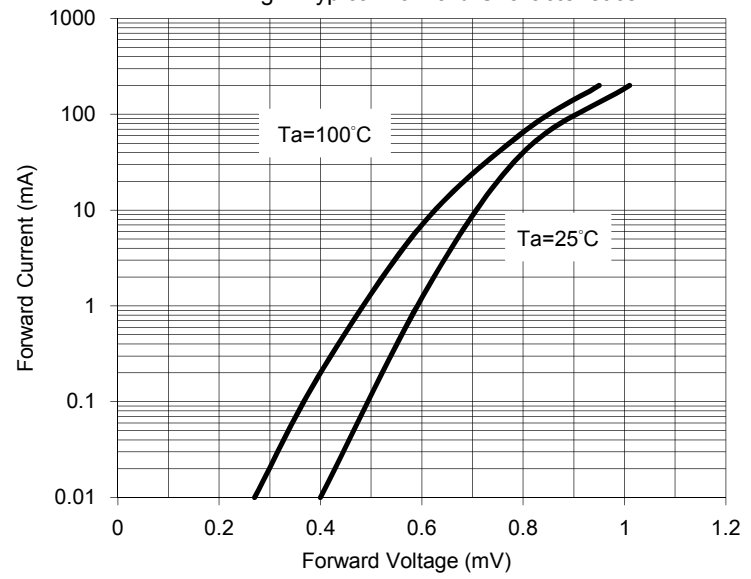


Fig. 3 Power Derating Curve

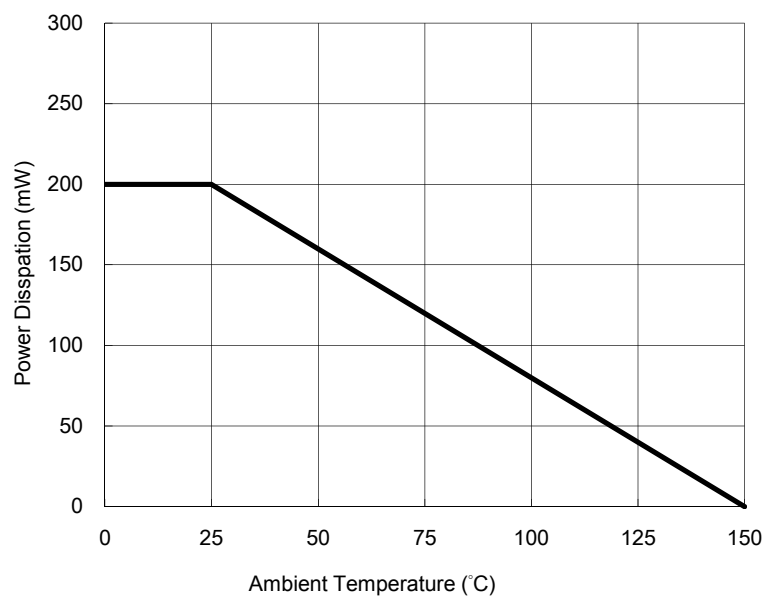


Fig. 4 Typical Capacitance Characteristics

