



# 1N4148WS, 1N4448WS

## Surface Mount Switching Diodes

Voltage 100 volts Power 250mwatts

### SOD-323L



### FEATURES

- ◆ Fast switching speed
- ◆ Surface mount package ideally suited for automatic insertion
- ◆ Electrically identical to standard JEDEC
- ◆ High conductance

### MECHANICAL DATA

**Case:** SOD-323L, plastic

**Terminals:** Solderable per MIL-STD-202, method 208

**Approx:** Weight: 0.008 gram

**Marking:** A2, A3

Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load.

For capacitive load current derate by 20%.

	SYMBOLS	1N4148WS	1N4448WS	UNITS
Reverse Voltage	$V_R$	75	75	Volts
Peak Reverse Voltage	$V_{RM}$	100	100	Volts
Rectified Current(Average), Half Wave Rectification with Resistive Load and $f \geq 50\text{Hz}$	$I_o$	150	150	mAmps
Peak forward surge current 0.001ms single half sine wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	4.0	4.0	Amps
Power Dissipation Derate Above 25°C	$P_{TOT}$	200	200	mWatts
Maximum Forward Voltage	$V_F$	1@ $I_F=10\text{mA}$	0.72@ $I_F=5\text{mA}$ 1@ $I_F=10\text{mA}$	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^\circ\text{C}$	$I_R$	2.5	2.5	$\mu\text{A}$
Typical junction capacitance (NOTE 1)	$C_{JOT}$	1.5	4.0	pF
Maximum Reverse Recovery (NOTE 2)	$t_{rr}$	4.0	4.0	ns
Maximum Thermal Resistance	$R_{\theta JA}$	357		$^\circ\text{C/W}$
Storage Temperature Range	$T_J$	-55 to +125		$^\circ\text{C}$

NOTES:

1.  $C_J$  at  $V_R=0$ ,  $f=1\text{MHz}$ .

2. From  $I_F=10\text{mA}$  to  $I_R=1\text{mA}$ ,  $V_R=6\text{ volts}$ ,  $R_L=100\Omega$

## RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Voltage

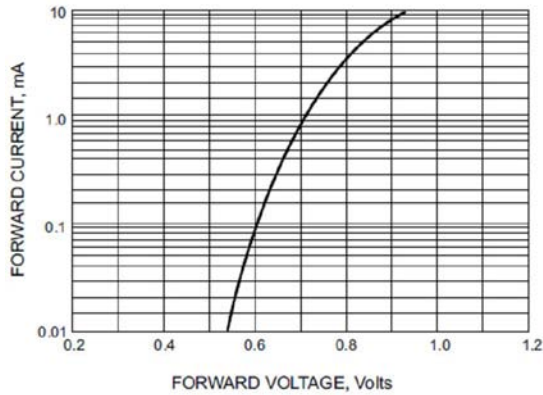


Fig.2 Leakage Current

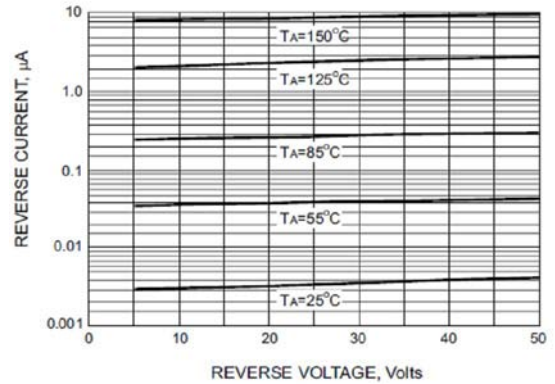


Fig.3 Typical Capacitance

