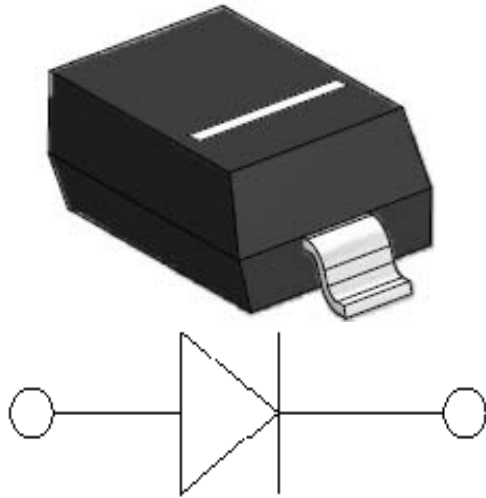


## High Speed Switching Diode



### Features

- $V_R$  75V
- $I_{FAV}$  250mA

### Typical Applications

- Extreme fast switches

### Mechanical Data

- **Package:** SOD323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** T5

### ■ Maximum Ratings ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
DC Blocking Voltage	$V_R$	V	$I_R=100\mu\text{A}$	75
Peak forward surge current	$I_{FSM}$	A	$t_p=1\mu\text{s}$	2
Average forward current	$I_{FAV}$	mA		250
Power dissipation	$P_{tot}$	mW		200
Thermal Resistance	$R_{thJA}$	$^\circ\text{C}/\text{W}$		625
Maximum junction temperature	$T_j$	$^\circ\text{C}$		-55 to +150
Storage temperature range	$T_{stg}$	$^\circ\text{C}$		-55 to +150

### ■ Electrical Characteristics ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Maximum Forward voltage	$V_F$	V	$I_F=5.0\text{mA}$	0.720
			$I_F=10\text{mA}$	0.855
			$I_F=100\text{mA}$	1
			$I_F=150\text{mA}$	1.25
Maximum Reverse current	$I_R$	nA	$V_R=20\text{V}$	25
		$\mu\text{A}$	$V_R=25\text{V}, T_J=150^\circ\text{C}$	30
		nA	$V_R=75\text{V}$	200
		$\mu\text{A}$	$V_R=75\text{V}, T_J=150^\circ\text{C}$	50
Minimum Breakdown voltage	$V_R$	V	$I_R=1\mu\text{A}$	75
Maximum Diode capacitance	$C_D$	pF	$V_R=V_F=0\text{V}, f=1\text{MHz}$	4
Maximum Reverse recovery time	$t_{rr}$	ns	$I_F=10\text{mA}, I_{rr}=0.1I_R, R_L=100\Omega$	4



# 1N4448WS

## Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1N4448WS	F2	Approximate 0.0048	3000	30000	120000	7" reel

## Characteristics (Typical)

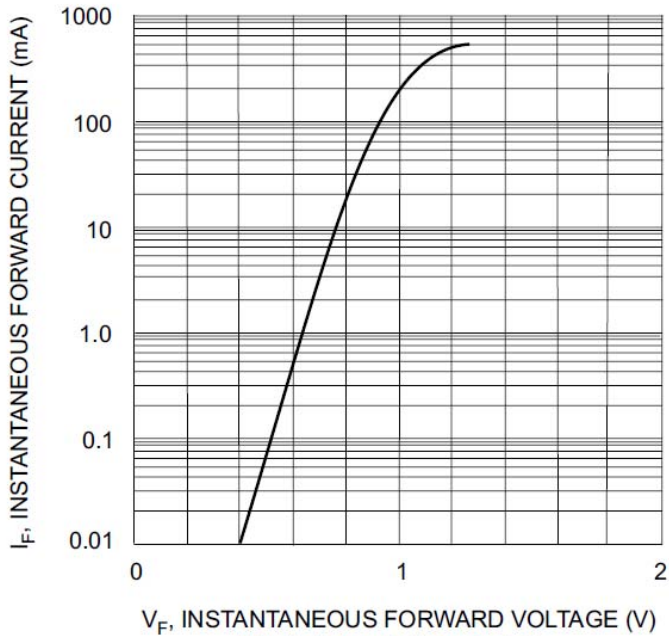


Fig. 1 Forward Characteristics

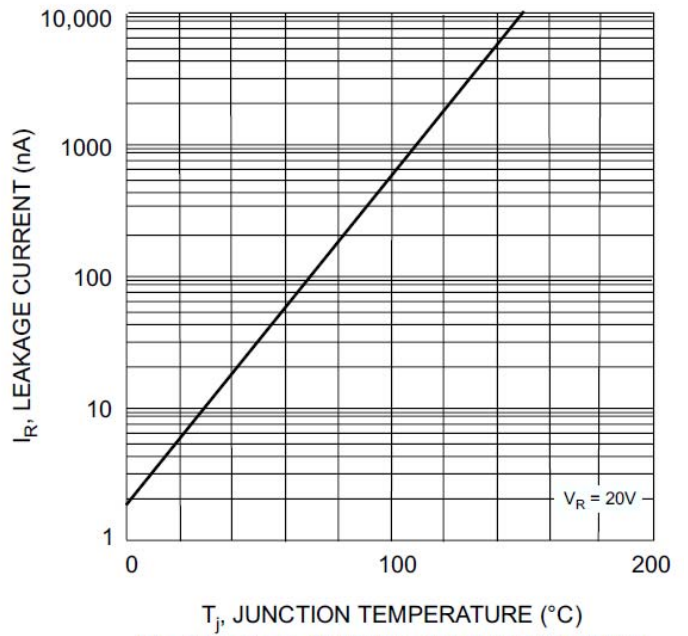
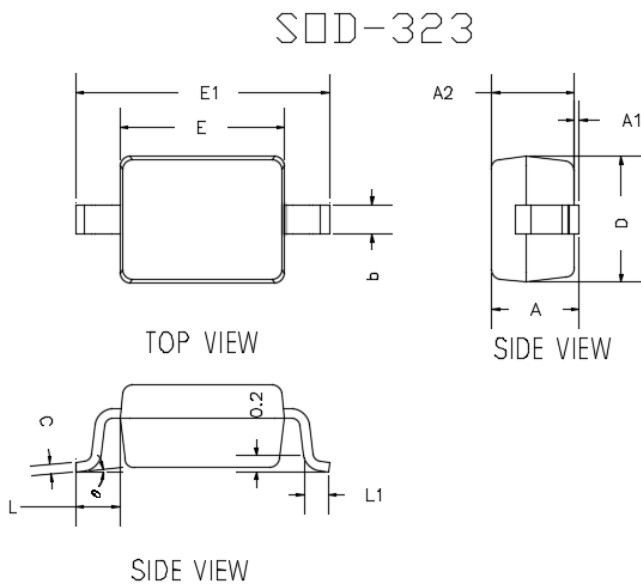


Fig. 2 Leakage Current vs Junction Temperature



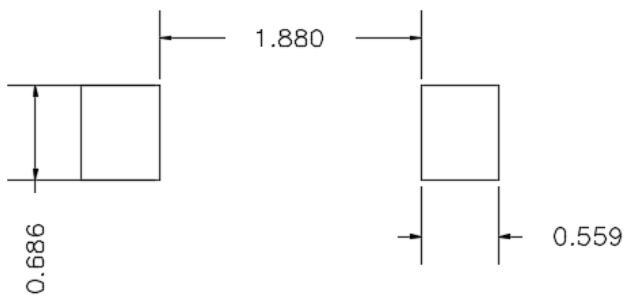
# 1N4448WS

## ■Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	---	0.0393	---	1.0000
A1	0.0000	0.0039	0.0000	0.1000
A2	0.0314	0.0354	0.8000	0.9000
b	0.0098	0.0157	0.2500	0.4000
c	0.0031	0.0059	0.0800	0.1500
D	0.0472	0.0551	1.2000	1.4000
E	0.0629	0.0709	1.6000	1.8000
E1	0.0984	0.1063	2.5000	2.7000
L	0.0187TYP		0.475TYP	
L1	0.0098	0.0157	0.250	0.400
e	0°	8°	0°	8°

## ■Soldering Footprint



UNIT : mm

SUGGESTED SOLDER PAD LAYOUT



# 1N4448WS

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