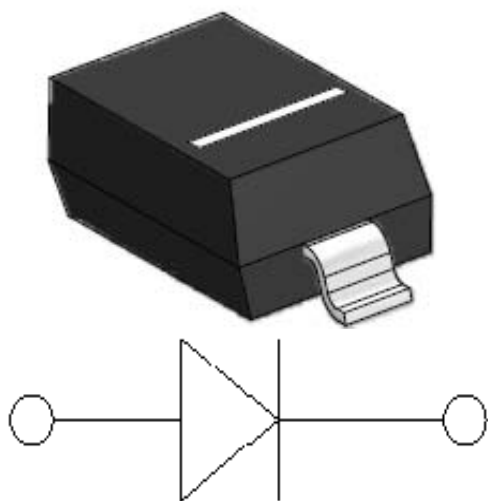


High Speed Switching Diode



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
		μA	$V_R=25\text{V}, T_J=150^\circ\text{C}$	30
		nA	$V_R=75\text{V}$	200
		μA	$V_R=75\text{V}, T_J=150^\circ\text{C}$	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 0.004	3000	30000	120000	7" reel

Characteristics (Typical)

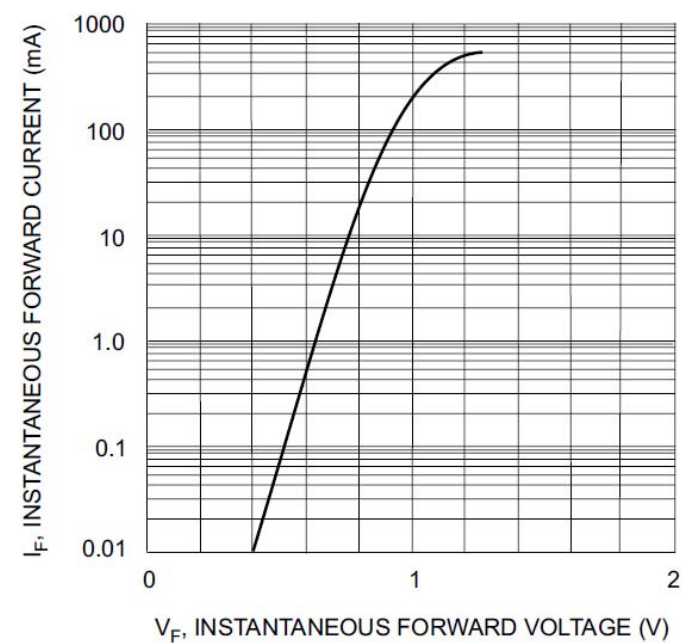


Fig. 1 Forward Characteristics

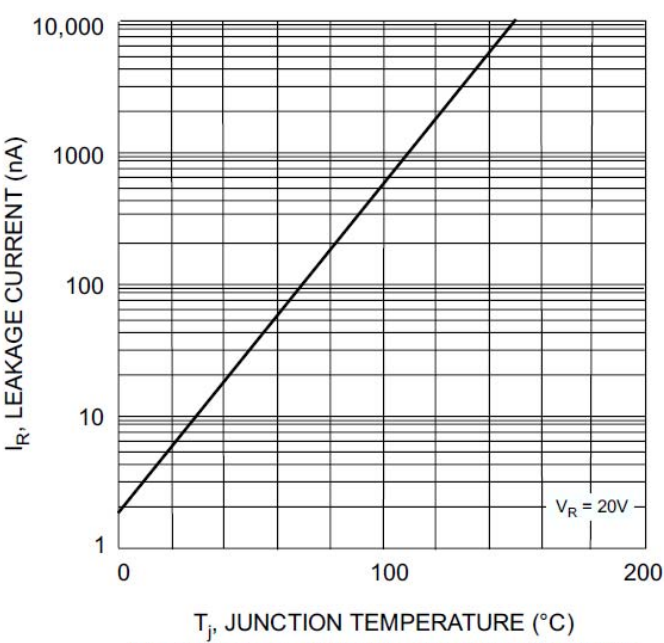
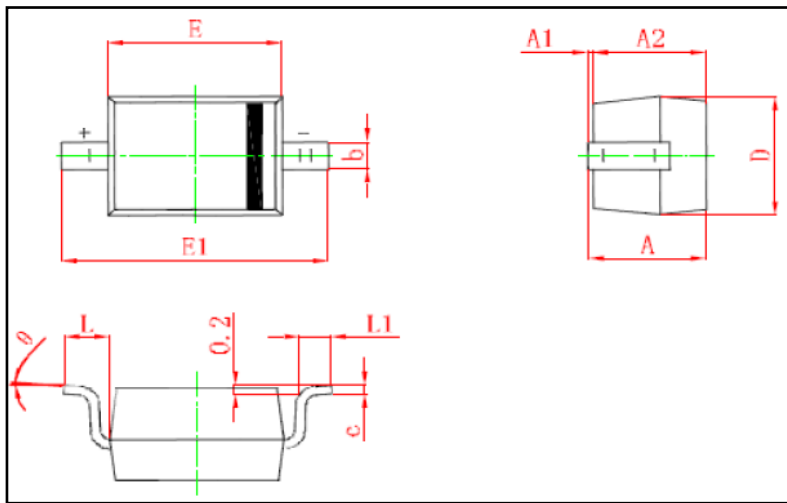


Fig. 2 Leakage Current vs Junction Temperature

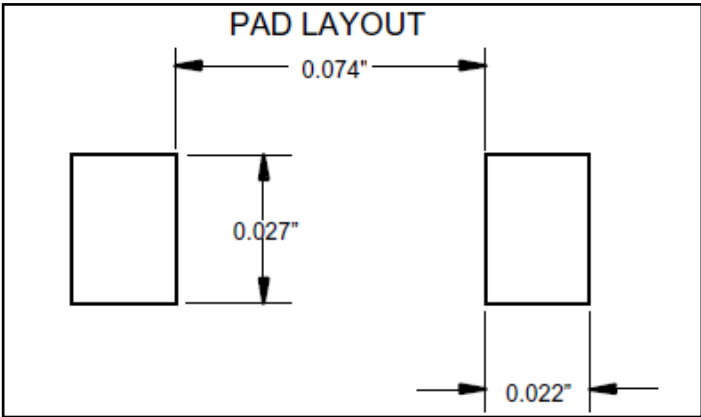
1N4448WS

■ Outline Dimensions



Symbol	Min. (mm)	Max. (mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.400
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
θ	0°	8°

■ Soldering Footprint



Unit: inches