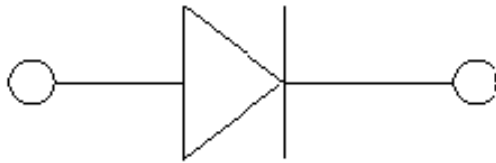


## High Speed Switching Diode



### Features

- $V_R$  80V
- $I_{FAV}$  150mA

### Typical Applications

- Extreme fast switches

### Mechanical Data

- **Package:** SOD323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Epoxy meets UL-94 V-0 flammability rating, halogen-free
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** A1

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

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	$V_{RRM}$	V		80
Peak forward surge current	$I_{FSM}$	A	$t_p=1\mu\text{s}$	2
Average forward current	$I_{FAV}$	mA		150
Power dissipation	$P_D$	mW		200
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	$^\circ\text{C}/\text{W}$		625
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	MIN	TYP	MAX
Forward voltage	$V_F$	V	$I_F=100\text{mA}$			1.2
Reverse current	$I_{R1}$	nA	$V_R=80\text{V}$			100
	$I_{R2}$	$\mu\text{A}$	$V_R=80\text{V}, T_a=125^\circ\text{C}$			1
Breakdown voltage	$V_R$	V	$I_R=100\mu\text{A}$	80		
Diode capacitance	$C_D$	pF	$V_R=0\text{V}, f=1\text{MHz}$		4	5
Reverse recovery time	$t_{rr}$	ns	$I_F=10\text{mA}, I_{rr}=0.1I_R, R_L=100\Omega$		65	80

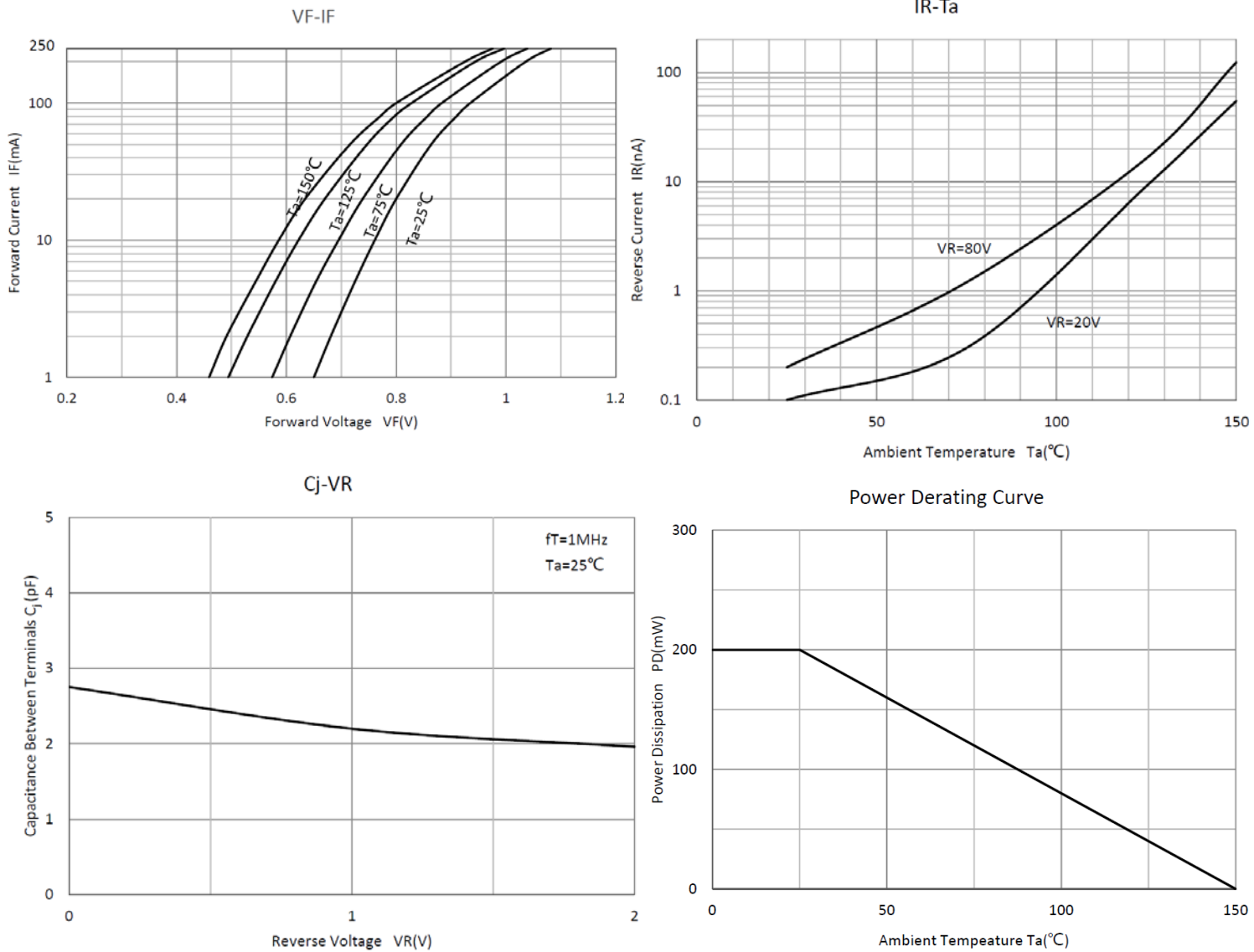


# 1N4148WSL

## Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1N4148WSL	F2	Approximate 0.0048	3000	30000	120000	7" reel

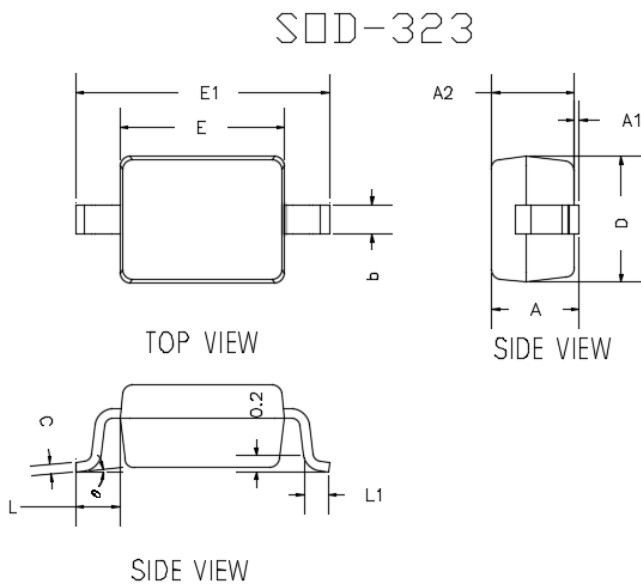
## Characteristics (Typical)





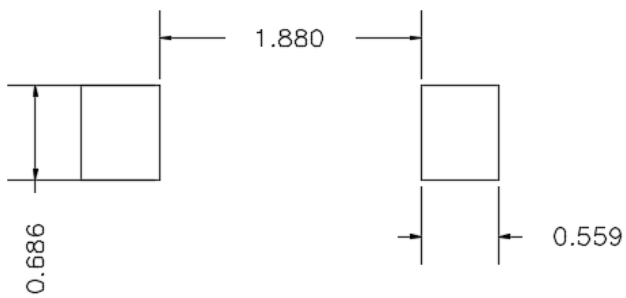
# 1N4148WSL

## ■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



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