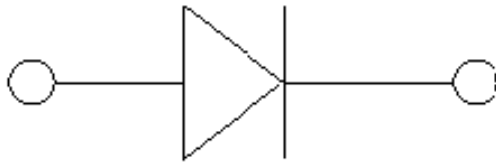


High Speed Switching Diode



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
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	MIN	MAX
Maximum Forward voltage	V_F	V	$I_F=100\text{mA}$		1.2
Maximum Reverse current	I_R	nA	$V_R=80\text{V}$		100
Minimum Breakdown voltage	V_R	V	$I_R=100\mu\text{A}$	80	
Maximum Diode capacitance	C_D	pF	$V_R=0\text{V}, f=1\text{MHz}$		4
Maximum Reverse recovery time	t_r	ns	$I_F=10\text{mA}, I_{rr}=0.1I_R, R_L=100\Omega$		50

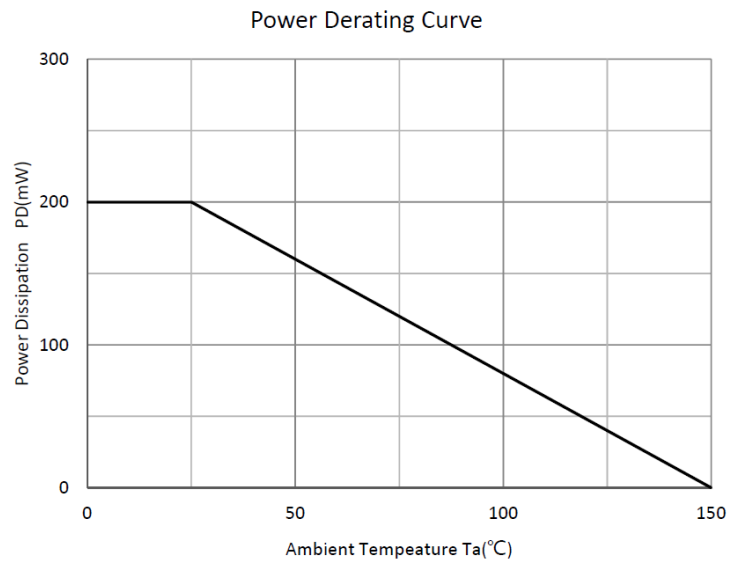
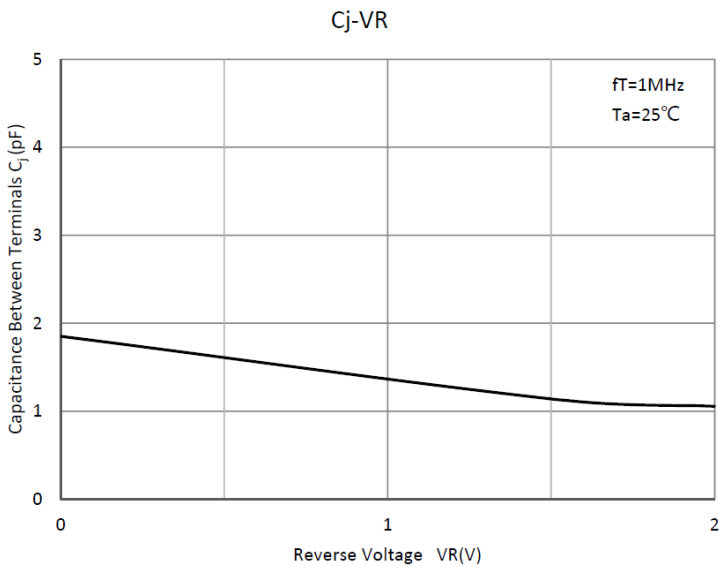
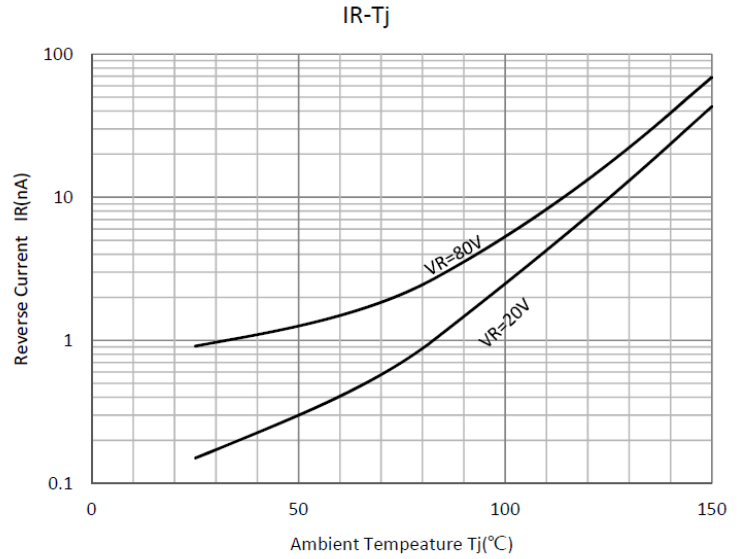
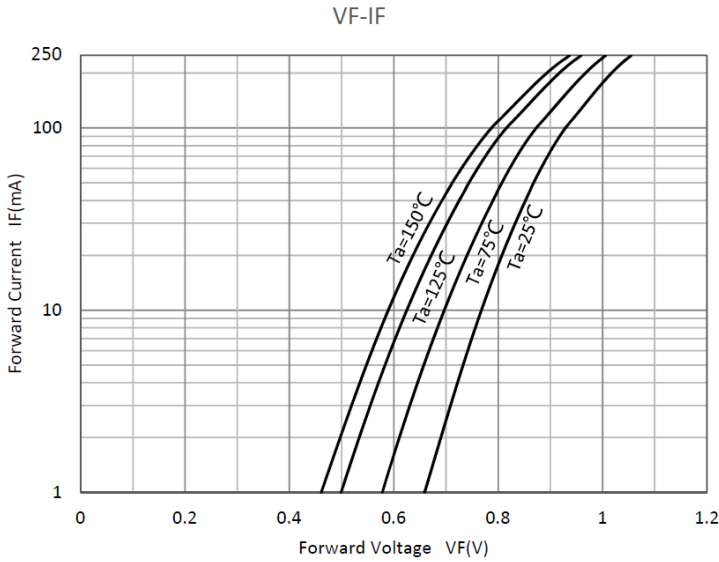


1N4148WSL

Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1N4148WSL	F2	Approximate 0.004	3000	30000	120000	7" reel

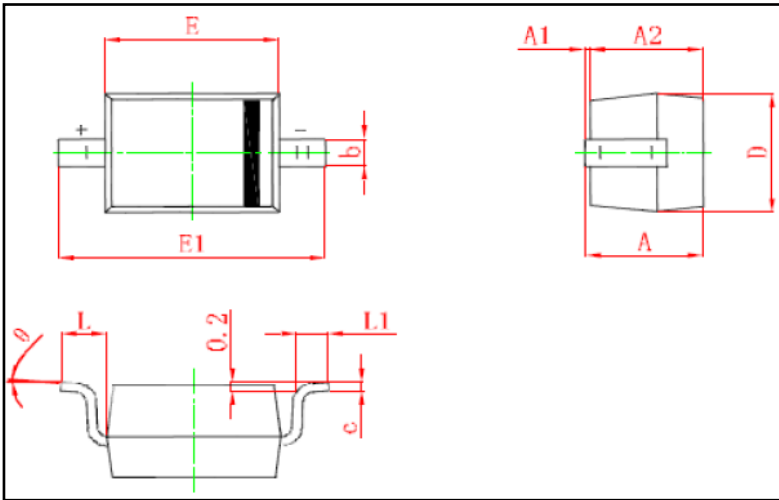
Characteristics (Typical)





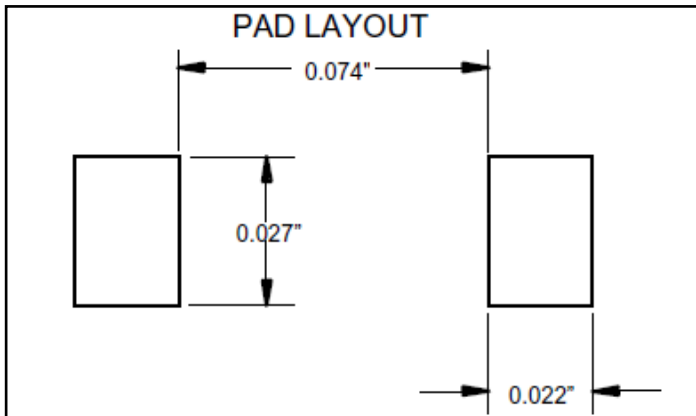
1N4148WSL

■ SOD-323 Package 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°

■ SOD-323 Soldering Footprint



Unit: inches



Disclaimer

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The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

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