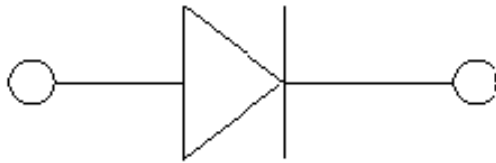


## High Speed Switching Diode



### Features

- $V_R$  75V
- $I_{FAV}$  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:** T4

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

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	$V_{RRM}$	V		100
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	VALUE
Maximum Forward voltage	$V_F$	V	$I_F=10\text{mA}$	1.0
Maximum Reverse current	$I_R$	nA	$V_R=20\text{V}$	25
	$I_R$	$\mu\text{A}$	$V_R=75\text{V}$	1.0
Minimum Breakdown voltage	$V_R$	V	$I_R=1\mu\text{A}$	75
Maximum Diode capacitance	$C_D$	pF	$V_R=0\text{V}$ , $f=1\text{MHz}$	4
Maximum Reverse recovery time	$t_{rr}$	ns	$I_F=10\text{mA}$ , $V_R=6\text{V}$ , $I_{rr}=1\text{mA}$ , $R_L=100\Omega$	4

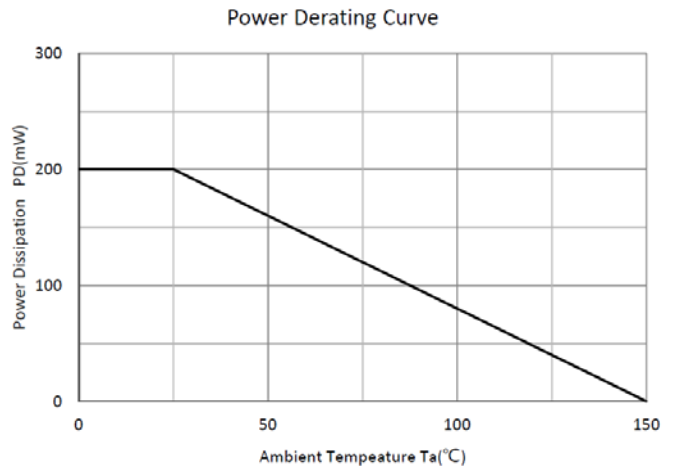
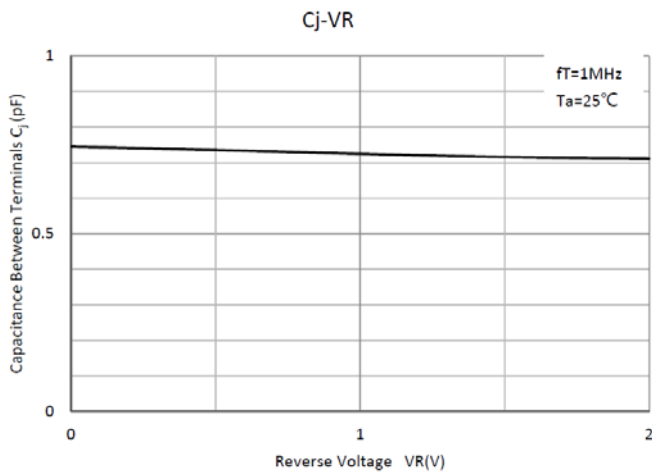
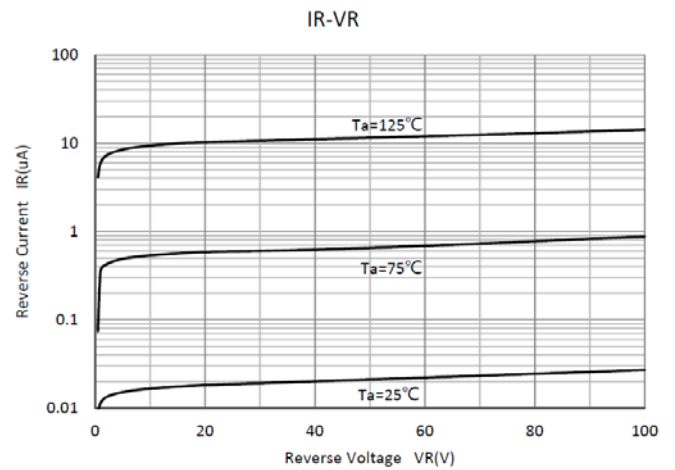
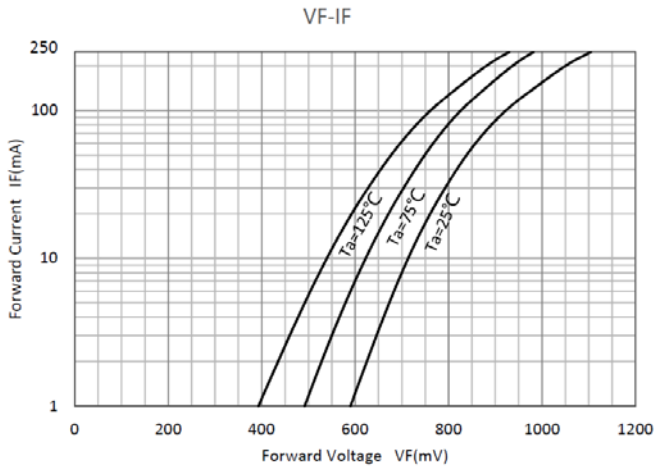


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## Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1N4148WS	F2	Approximate 0.004	3000	30000	120000	7" reel

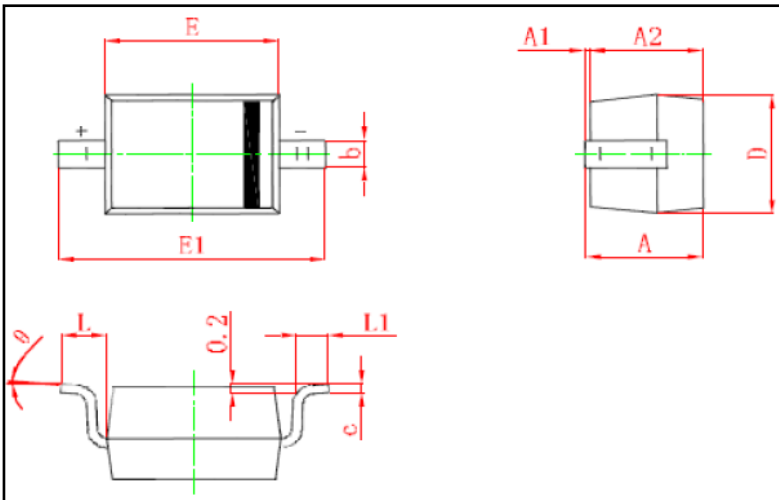
## Characteristics (Typical)





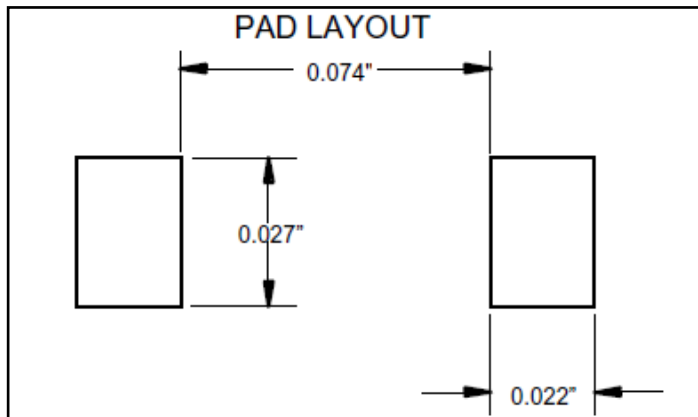
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## ■ SOD-323 Package Outline Dimensions



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
$\theta$	0°	8°

## ■ SOD-323 Soldering Footprint



Unit: inches



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