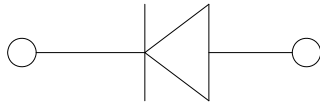


## Small-Signal Fast Switching Diodes



### Features

- $V_R$  75V
- $I_{FAV}$  150mA

### Typical Applications

- Extreme fast switches

### Mechanical Data

- **Package:** SOD123G
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **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
Reverse voltage	$V_R$	V		75
Peak forward surge current	$I_{FSM}$	A	Pulse width=1 us Pulse width=1 s	2 0.5
Repetitive peak forward current	$I_{FRM}$	mA		300
Average forward current	$I_{FAV}$	mA		150
Power dissipation	$P_{tot}$	mW		400
Maximum junction temperature	$T_j$	$^\circ\text{C}$		-65 ~+150
Storage temperature range	$T_{stg}$	$^\circ\text{C}$		-65 ~+150
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	$^\circ\text{C/W}$		315
Thermal Resistance Junction to Case	$R_{\theta JC}$	$^\circ\text{C/W}$		740

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

PARAMETER	Symbol	UNIT	Conditions	Min	Max
Breakdown Voltage	$V_R$	V	$I_R=10\mu\text{A}$	100	
Forward Voltage	$V_F$	V	$I_F=10\text{mA}$ $I_F=100\text{mA}$		1.00 1.25
Reverse Leakage Current	$I_{R1}$	nA	$V_R=20\text{V}$		25
	$I_{R2}$	$\mu\text{A}$	$V_R=75\text{V}$		1
Capacitance	$C$	pF	$V_R=0\text{V}, f=1\text{MHz}$		4
Reverse Recovery Time	$T_{rr}$	ns	$I_F=I_R=10\text{mA}, I_{rr}=0.1*I_R,$ $R_L=100\Omega$		4

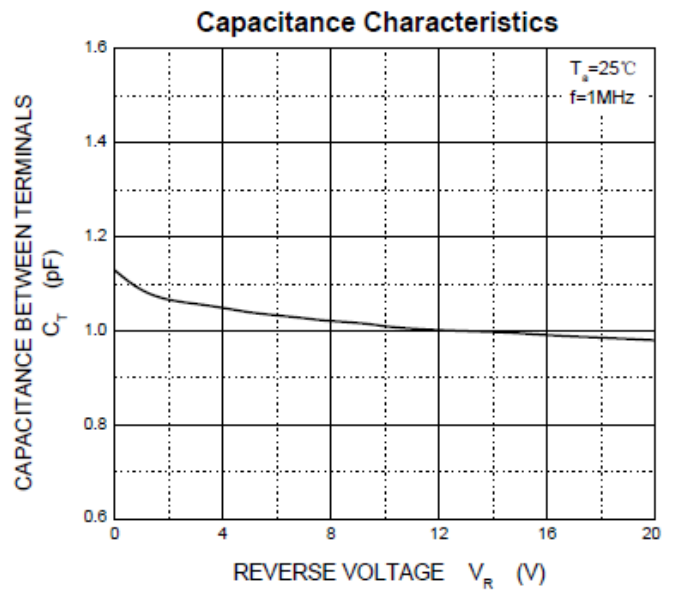
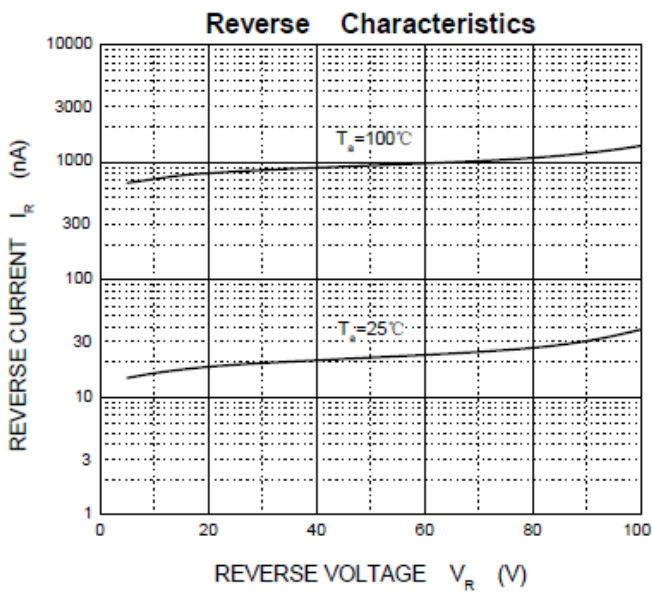
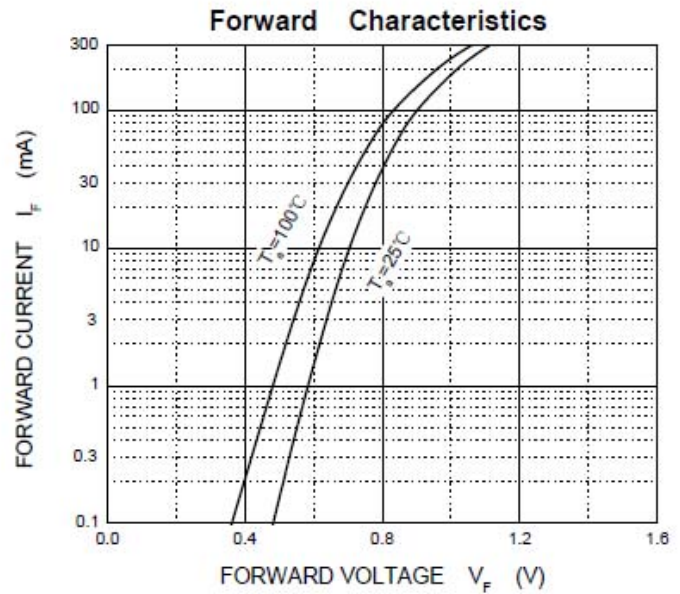
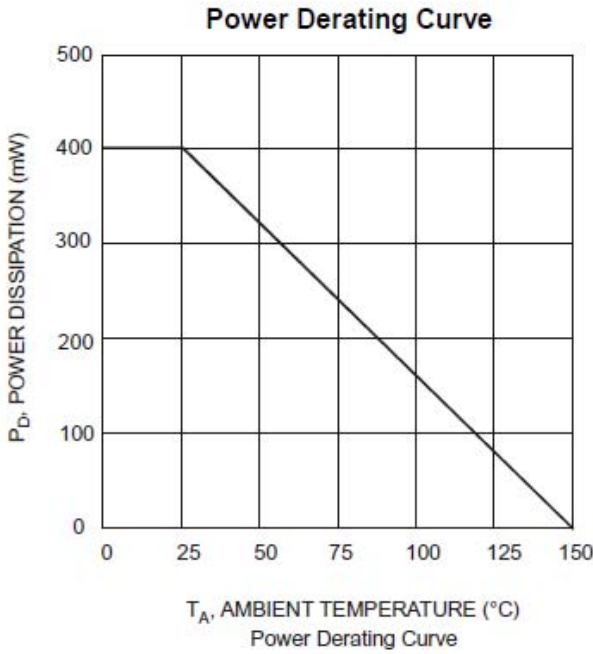


# 1N4148W

## ■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1N4148W	F1	Approximate 0.011	3000	45000	180000	7" reel
1N4148W	F2	Approximate 0.011	3000	30000	120000	7" reel

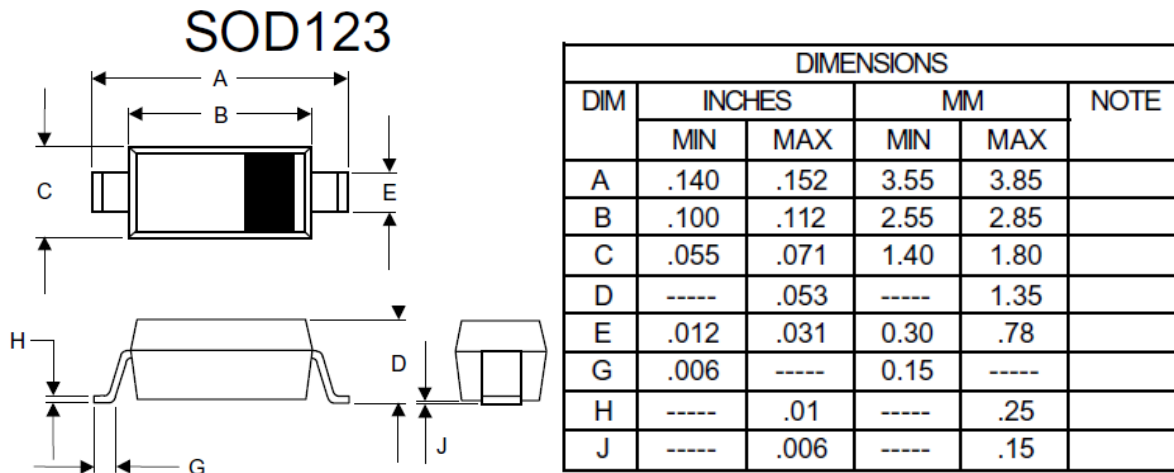
## ■ Characteristics (Typical)



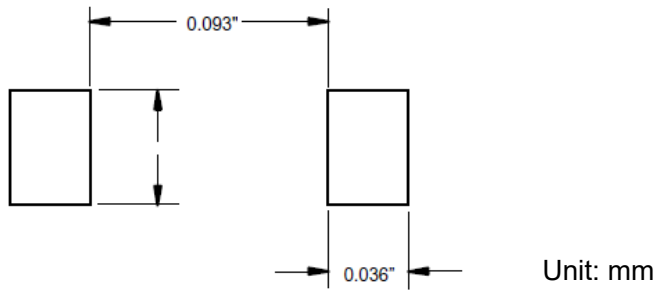


# 1N4148W

## ■ Outline Dimensions



## ■ Soldering Footprint





# 1N4148W

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## Disclaimer

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