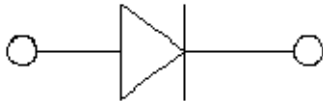


## Small-Signal Fast Switching Diodes



### Features

- $V_R$  75V
- $I_{F(AV)}$  250mA

### Typical Applications

- Extreme fast switches

### Mechanical Data

- **Package:** SOD123
- **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
Repetitive peak reverse voltage	$V_{RRM}$	V		100
Reverse voltage	$V_R$	V	$I_R=100\mu\text{A}$	100
Peak forward surge current	$I_{FSM}$	A	Pulse width=1 $\mu\text{s}$ Pulse width=1 s	2 0.5
Average forward current	$I_{FAV}$	mA		250
Power dissipation	$P_{tot}$	mW		500
Maximum junction temperature	$T_j$	$^\circ\text{C}$		-55 to +150
Storage temperature range	$T_{stg}$	$^\circ\text{C}$		-55to +150
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	$^\circ\text{C}/\text{W}$		315

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

PARAMETER	Symbol	UNIT	Conditions	Min	Max
Breakdown Voltage	$V_R$	V	$I_R=100\mu\text{A}$	100	
Forward Voltage	$V_F$	V	$I_F=100\text{mA}$		1.00
Reverse Leakage Current	$I_{R1}$	nA	$V_R=20\text{V}$		25
	$I_{R2}$	nA	$V_R=75\text{V}$		200
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



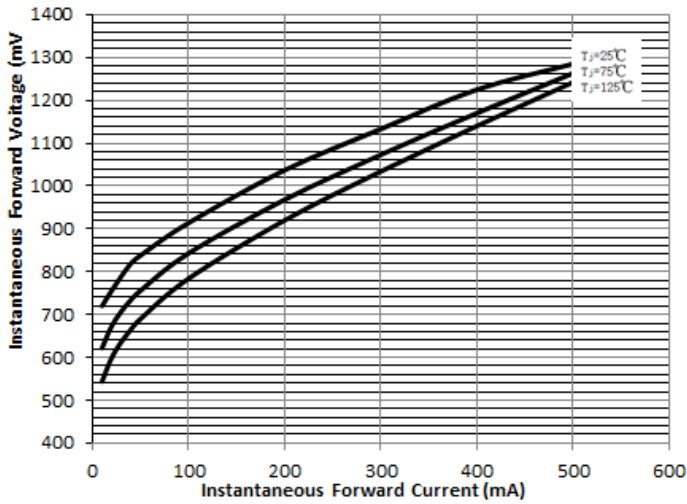
# 1N4448W

## Ordering Information (Example)

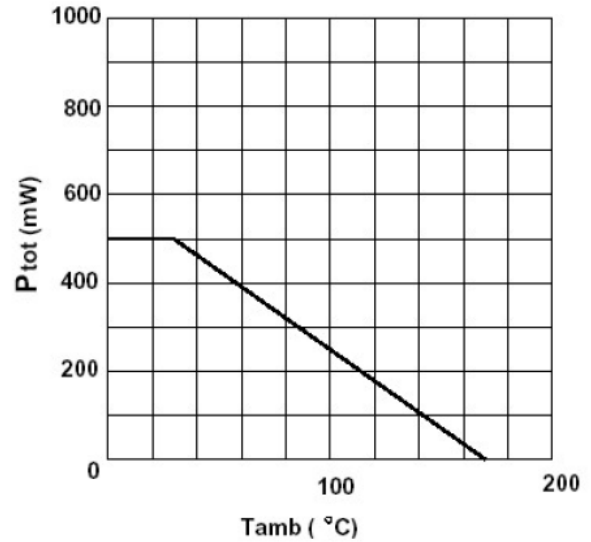
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1N4448W	F2	Approximate 0.011	3000	30000	120000	7" reel

## Characteristics (Typical)

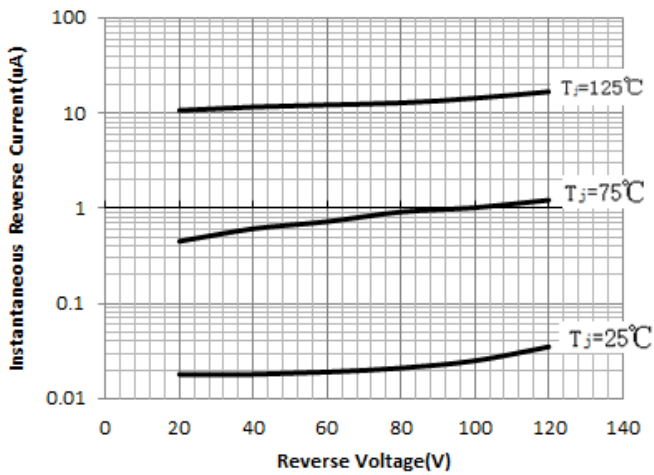
Typical Instantaneous Forward Characteristics



Admissible power dissipation versus ambient temperature



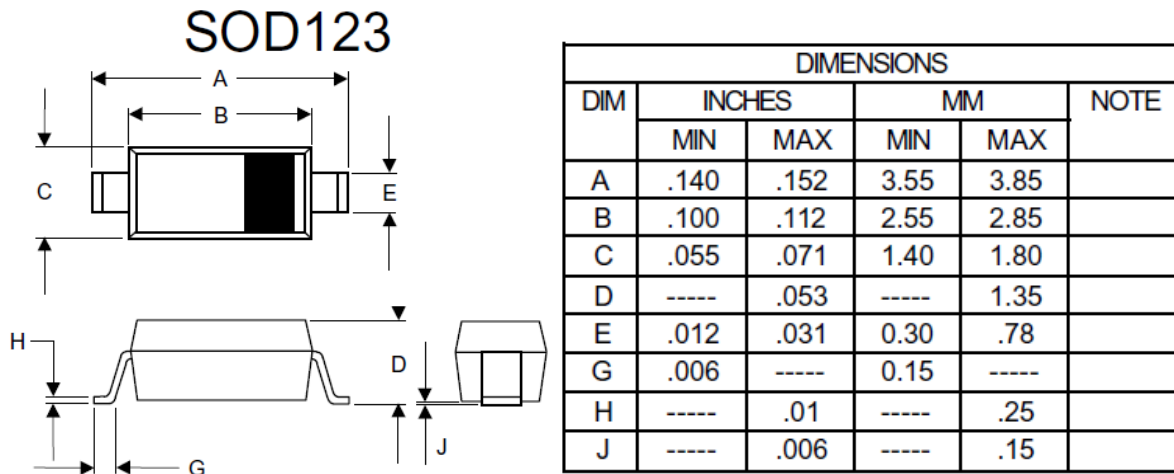
Typical Reverse Characteristics



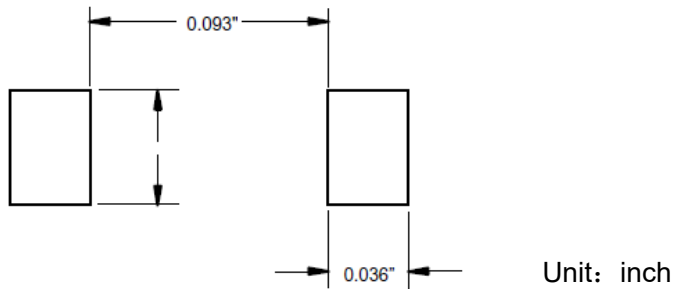


# 1N4448W

## ■ Outline Dimensions



## ■ Soldering Footprint





# 1N4448W

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## Disclaimer

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