

# DESCRIPTION

The 1N4448WTF is available in SOD-523 Package.

# **FEATURES**

- Fast Switching Device (t<sub>rr</sub> <4.0ns)</li>
- General Purpose Diodes
- Extremely Small SOD-523 Package
- Flat Lead SOD-523 Small Outline Plastic Package
- Surface Device Type Mounting
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode
- Available in SOD-523 Package

# ORDERING INFORMATION

Package Type	Part Number		
SOD-523	1N4448WTF		
Note	SPQ: 3,000pcs/Reel		
AiT provides all RoHS Compliant Products			

### PIN DESCRIPTION



**Electrical Symbol** 

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# **ABSOLUTE MAXIMUM RATINGS**

#### $T_A = 25^{\circ}C$

TA - 25 C	
V <sub>RSM</sub> , Non-Repetitive Peak Reverse Voltage	100V
V <sub>RRM</sub> , Repetitive Peak Reverse Voltage	75V
IFRM, Repetitive Peak Forward Current	300mA
Io, Continuous Forward Current	150mA
I <sub>FSM</sub> , Non-repetitive Peak Forward Surge Current (Pulse Width=1us)	2A
P <sub>D</sub> , Power Dissipation	200mW
T <sub>STG</sub> , Storage Temperature Range	-55°C ~ +150°C
T <sub>J</sub> , Operating Junction Temperature	+150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

# **ELECTRICAL CHARACTERISTICS**

 $T_A = 25^{\circ}C$ 

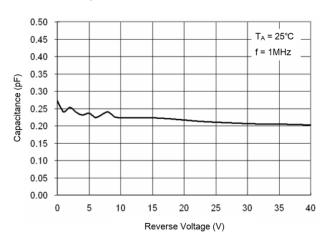
Parameter	Symbol	Conditions	Min.	Тур.	Max	Unit
Breakdown Voltage	B <sub>V</sub>	I <sub>R</sub> =100μA	100	-	1	V
		I <sub>R</sub> =5μA	75	-	1	
Reverse Leakage	I <sub>R</sub>	V <sub>R</sub> = 20V	1	-	25	nA
Current		V <sub>R</sub> = 75V	-	-	5	μΑ
Forward Voltage	VF	I <sub>F</sub> = 5mA	0.62	-	-	V
		I <sub>F</sub> = 10mA	1	-	1	
		I <sub>F</sub> = 100mA	-	-	1	
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =10mA, I <sub>R</sub> =60mA	1	-	4	ns
		R <sub>L</sub> =100Ω, I <sub>rr</sub> =1mA				
Capacitance	С	V <sub>R</sub> =0V, f=1MHz	-	-	4	рF

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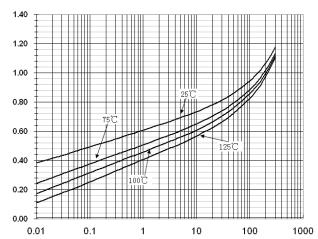


# TYPICAL CHARACTERISTICS

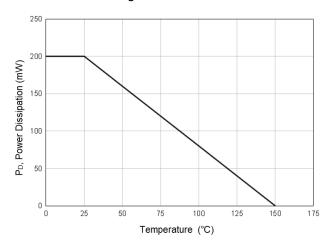
#### 1. Total Capacitance



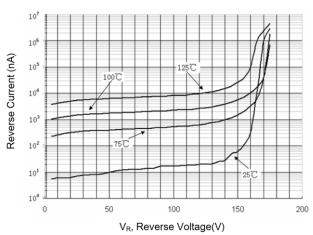
#### 2. Forward Voltage(V) vs. Forward Current(mA)



#### 3. Power Derating Curve



#### 4. Reverse Current vs. Reverse Voltage

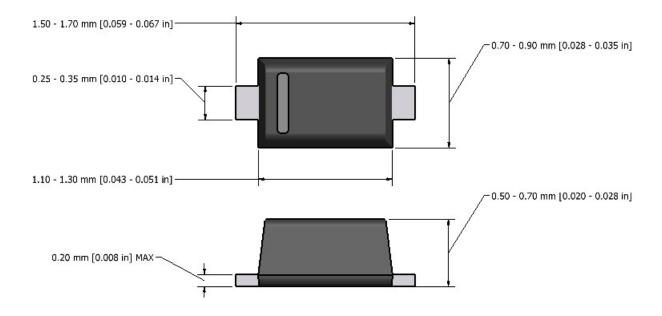


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# PACKAGE INFORMATION

Dimension in SOD-523 Package (Unit: mm)



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