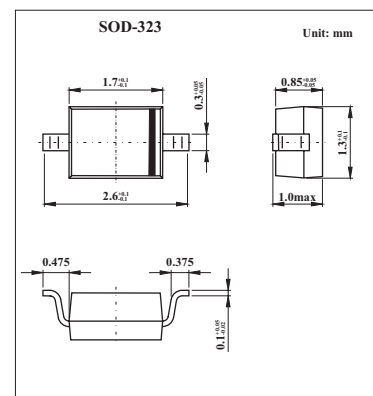


## Surface Mount Fast Switching Diodes

## 1N4448WS

## ■ Features

- Fast Switching Speed
- Ultra-Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance



## ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	100	V
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>		
Working Peak Reverse Voltage	V <sub>RWM</sub>	75	V
DC Blocking Voltage	V <sub>R</sub>		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	53	V
Forward Continuous Current	I <sub>FM</sub>	500	mA
Average Rectified Output Current	I <sub>O</sub>	250	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0 μs	I <sub>FSM</sub>	4.0	A
@ t = 1.0s		2.0	
Power Dissipation	P <sub>D</sub>	200	mW
Thermal Resistance Junction to Ambient Air	R <sub>θJA</sub>	625	°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +150	°C

**1N4448WS**

## ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage (*)	V <sub>(BR)R</sub>	I <sub>R</sub> = 2.5 μ A	75			V
Forward Voltage (*)	V <sub>F</sub>	I <sub>F</sub> = 5.0mA	0.62		0.72	V
		I <sub>F</sub> = 10mA			0.855	
		I <sub>F</sub> = 100mA			1.0	
		I <sub>F</sub> = 150mA			1.25	
Leakage Current (*)	I <sub>R</sub>	V <sub>R</sub> = 75V			2.5	μ A
		V <sub>R</sub> = 75V, T <sub>j</sub> = 150°C			50	
		V <sub>R</sub> = 25V, T <sub>j</sub> = 150°C			30	
		V <sub>R</sub> = 20V			25	
Total Capacitance	C <sub>T</sub>	V <sub>R</sub> = 0, f = 1.0MHz			4.0	pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> = I <sub>R</sub> = 10mA, I <sub>rr</sub> = 0.1 x I <sub>R</sub> , R <sub>L</sub> = 100 Ω			4.0	ns

\* Short duration test pulse used to minimize self-heating effect.

## ■ Marking

Marking	T5
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