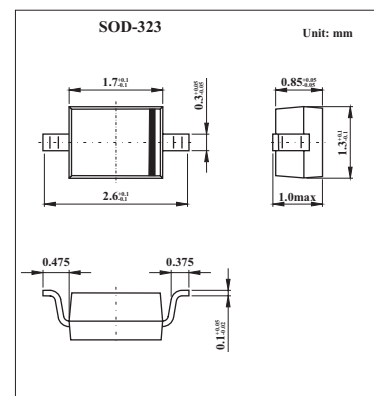


## Surface Mount Fast Switching Diodes

## 1N4448WS

## ■ Features

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

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Reverse Voltage	$V_{RRM}$		
Working Peak Reverse Voltage	$V_{RWM}$	75	V
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	$I_{FM}$	500	mA
Average Rectified Output Current	$I_O$	250	mA
Non-Repetitive Peak Forward Surge Current @ $t = 1.0 \mu\text{s}$	$I_{FSM}$	4.0	A
@ $t = 1.0\text{s}$		2.0	
Power Dissipation	$P_D$	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150	$^\circ\text{C}$

**1N4448WS**

## ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage (*)	V(BR)R	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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