

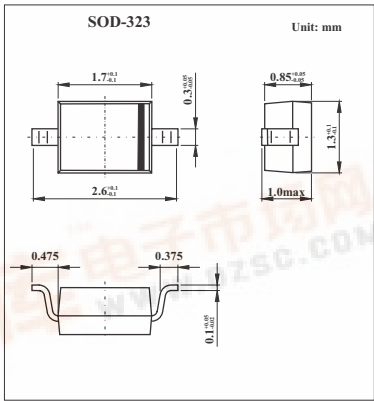
SMD Type

Diodes

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}	75	V
Working Peak Reverse Voltage	V_{RWM}		
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 @ $t = 1.0 \mu s$ @ $t = 1.0 s$	I_{FSM}	4.0	A
		2.0	
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	$^{\circ}\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150	$^{\circ}\text{C}$



1N4448WS■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage (*)	$V_{(BR)R}$	$I_R = 2.5\ \mu\text{A}$	75			V
Forward Voltage (*)	V_F	$I_F = 5.0\text{mA}$	0.62		0.72	V
		$I_F = 10\text{mA}$			0.855	
		$I_F = 100\text{mA}$			1.0	
		$I_F = 150\text{mA}$			1.25	
Leakage Current (*)	I_R	$V_R = 75\text{V}$			2.5	μA
		$V_R = 75\text{V}, T_j = 150^\circ\text{C}$			50	
		$V_R = 25\text{V}, T_j = 150^\circ\text{C}$			30	
		$V_R = 20\text{V}$			25	nA
Total Capacitance	C_T	$V_R = 0, f = 1.0\text{MHz}$			4.0	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100\ \Omega$			4.0	ns

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

■ Marking

Marking	T5
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