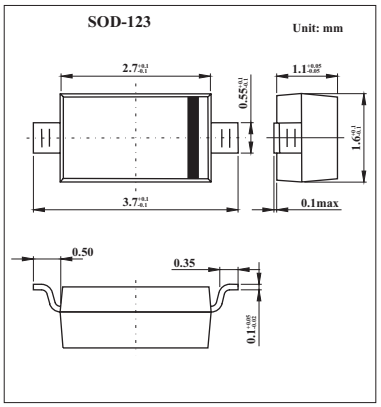
Surface Mount Fast Switching Diodes

1N4448W



Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
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 μ s @ t = 1.0s	I_{FSM}	4.0 2.0	A
Power Dissipation	P_D	400	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	315	℃/W
Operating and Storage Temperature Range	T_j,T_{STG}	-65 to +150	℃

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■ Electrical Characteristics Ta = 25℃

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

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

■ Marking

Marking	T5