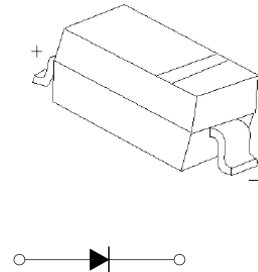




## SOD-123 Plastic-Encapsulate Diodes

**1N4448W** FAST SWITCHING DIODE

SOD-123



### FEATURES

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

MARKING: T5

### Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Peak 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
Peak Forward Surge Current @t=1.0μs	$I_{FSM}$	4.0	A
@t=1.0s		1.5	
Power Dissipation	$P_d$	500	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	250	°C/W
Storage Temperature and Junction Temperature	$T_{STG}/T_j$	-55~+150	°C

### Electrical Ratings @Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	75			V	$I_R=10\mu A$
Forward Voltage	$V_{F1}$	0.62		0.72	V	$I_F=5mA$
	$V_{F2}$			0.855	V	$I_F=10mA$
	$V_{F3}$			1.0	V	$I_F=100mA$
	$V_{F4}$			1.25	V	$I_F=150mA$
Reverse Current	$I_{R1}$			2.5	μA	$V_R=75V$
	$I_{R2}$			25	nA	$V_R=20V$
Capacitance Between Terminals	$C_T$			4	pF	$V_R=0V, f=1MHz$
Reverse Recovery Time	$t_{rr}$			4	ns	$I_F=I_R=10mA$ $I_{rr}=0.1I_R, R_L=100\Omega$

# Typical Characteristics

# 1N4448W

