

**FAST SWITCHING DIODES**
**1N4148WS**
**FEATURES**

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


**MARKING:** T4

**MAXIMUM RATINGS (TA=25°C unless otherwise noted)**

Parameter	Symbol	Value	Units
Non-Repetitive Peak reverse voltage	$V_{RM}$	100	V
Peak Repetitive Peak reverse voltage	$V_{RRM}$	75	V
Working Peak Reverse Voltage	$V_{RWM}$	75	V
DC Blocking	$V_R$	75	V
RMS Reverse Voltage	$R(RMS)$	53	V
Forward Continuous Current	$I_{FM}$	300	mA
Average Rectified Output Current	$I_O$	150	mA
Peak forward surge current @=1.0 $\mu$ s	$I_{FSM}$	2.0	A
Peak forward surge current @=1.0s	$I_{FSM}$	1.0	A
Power Dissipation	$P_d$	200	mW
Thermal	$R_{\theta JA}$	650	°C/W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{STG}$	-65~+150	°C

**ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)**

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	$V_{F1}$			0.715	V	$I_F=1mA$
Forward voltage	$V_{F2}$			0.855	V	$I_F=10mA$
Forward voltage	$V_{F3}$			1.0	V	$I_F=50mA$
Forward voltage	$V_{F4}$			1.25	V	$I_F=150mA$
Reverse current	$I_{R1}$			1	$\mu A$	$V_R=75V$
Reverse current	$I_{R2}$			25	nA	$V_R=20V$
Capacitance between terminals	$C_T$			2	pF	$V_R=0V, f=1MHz$
Reverse Recovery Time	$t_{rr}$			4	ns	$I_F=I_R=10mA, I_{rr}=0.1I_R, R_L=100\Omega$

**1N4148WS** Typical Characteristics

