

FAST SWITCHING DIODES

FEATURES

Fast Switching Speed

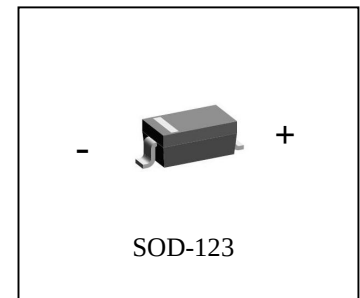
Surface Mount Package Ideally Suited for Automatic Insertion

For General Purpose Switching Applications

High Conductance

MARKING: T4

1N4148W



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 @=1.0μs	I_{FSM}	2.0	A
Peak forward surge current @=1.0s	I_{FSM}	1.0	A
Power Dissipation	P_d	500	mW
Thermal	$R_{\theta JA}$	250	°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	$I_F = 10 mA$
Forward voltage	V_{F3}			1.0	V	$I_F = 50 mA$
Forward voltage	V_{F4}			1.25	V	$I_F = 150 mA$
Reverse current	I_{R1}			1	μA	$V_R = 75 V$
Reverse current	I_{R2}			25	nA	$V_R = 20 V$
Capacitance between terminals	C_T			2	pF	$V_R = 0V, f = 1MHz$
Reverse Recovery Time	t_{rr}			4	ns	$I_F = I_R = 10mA$ $I_{rr} = 0.1 I_R, R_L = 100 \Omega$

1N4148W Typical Characteristics

