

FAST SWITCHING DIODES

1N4148W

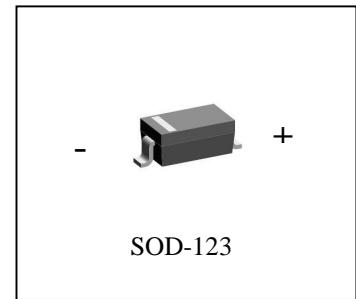
FEATURES

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 @=1.0μs	I _{FSM}	2.0	A
Peak forward surge current @=1.0s	I _{FSM}	1.0	A
Power Dissipation	P _d	500	mW
Thermal	R _{θJA}	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 Irr=0.1XIr, R _L =100 Ω

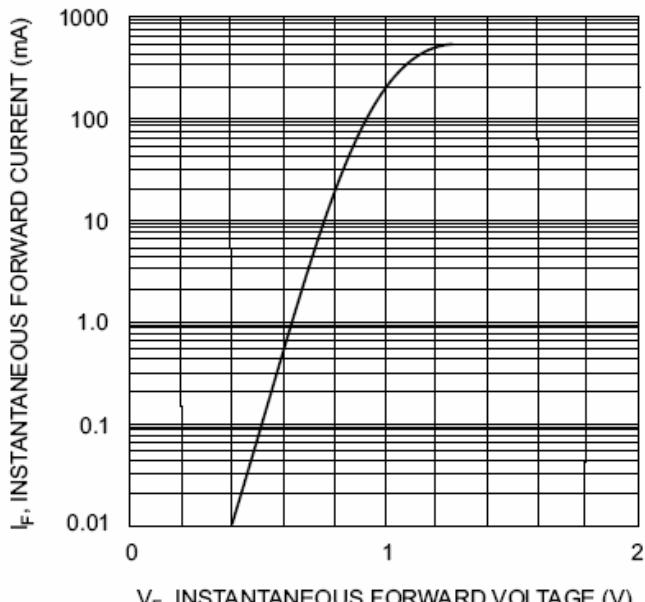
1N4148W Typical Characteristics

 V_F , INSTANTANEOUS FORWARD VOLTAGE (V)

Fig. 1 Forward Characteristics

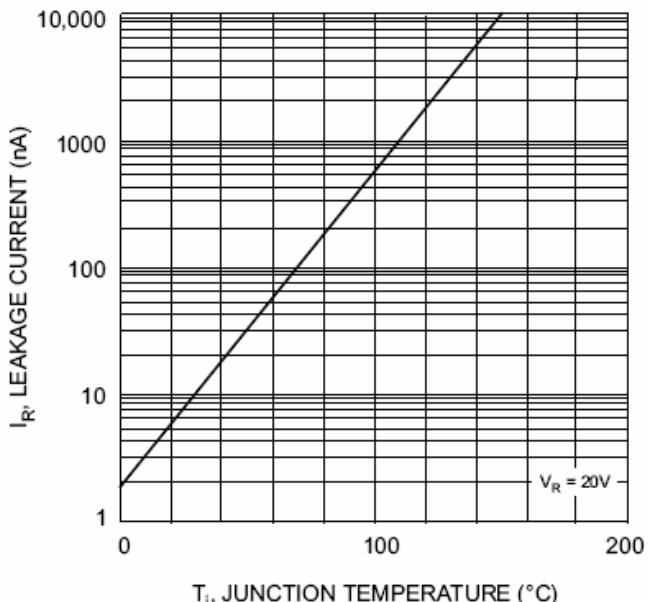

 T_j , JUNCTION TEMPERATURE (°C)

Fig. 2 Leakage Current vs Junction Temperature