

SOD-323 Plastic-Encapsulate Diodes

1N4148WS FAST SWITCHING DIODES

FEATURES

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

MARKING: T4



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

Parameter	Symbol	Limits		Unit
Non-Repetitive Peak reverse voltage	V _{RM}	100		V
Peak Repetitive Peak reverse voltage	V _{RRM}			
Working Peak Reverse Voltage	V _{RWM}	75		V
DC Blocking Voltage	V _R			
RMS Reverse Voltage	V _{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 @=1.0s	I _{FSM}	2.0 1.0		A
Power Dissipation	P _d	200		mW
Thermal Resistance Junction to Ambient	R _{θJA}	625		°C/W
Junction temperature	T _j	125		°C
Storage temperature	T _{STG}	-65~+150		°C

Electrical Ratings @T_A=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V _{F1}			0.715	V	I _F =1mA
	V _{F2}			0.855	V	I _F =10mA
	V _{F3}			1.0	V	I _F =50mA
	V _{F4}			1.25	V	I _F =150mA
Reverse current	I _{R1}			1	μA	V _R =75V
	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} =0.1XI _R ,R _L =100Ω

Typical Characteristics

1N4148WS

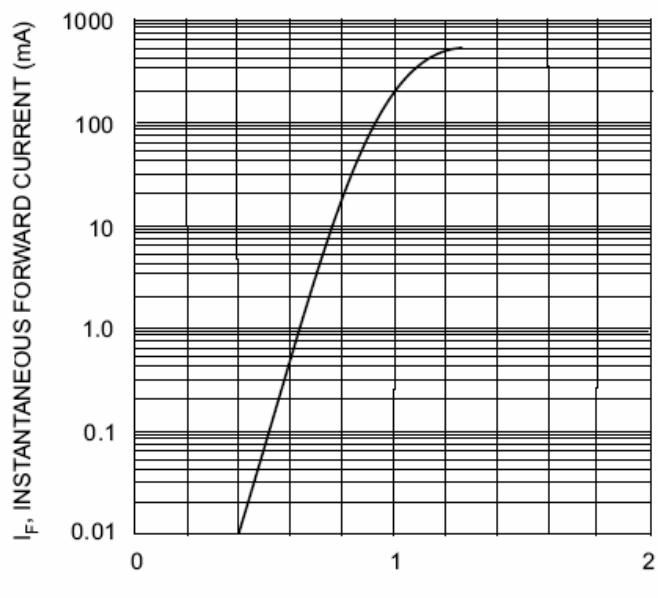


Fig. 1 Forward Characteristics

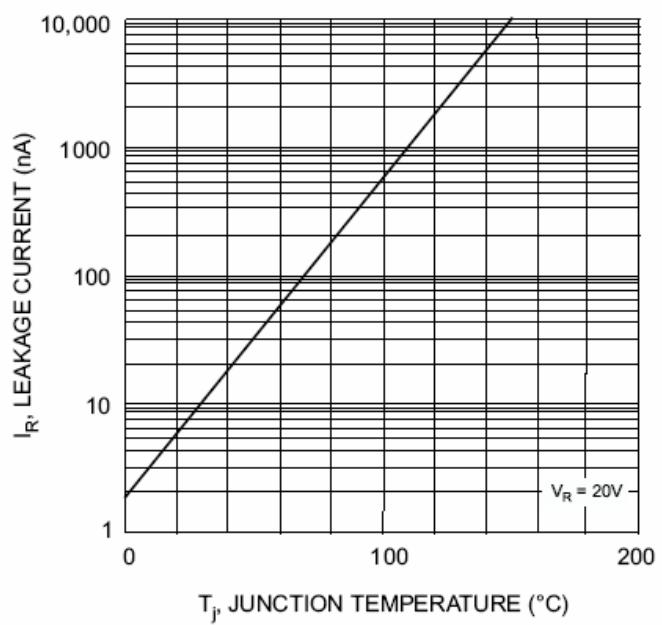


Fig. 2 Leakage Current vs Junction Temperature
 $V_R = 20V$