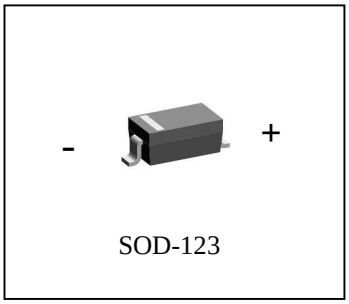
FAST SWITCHING DIODES

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℃ 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	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	150	mA
Peak forward surge current @=1.0μs	I_{FSM}	2.0	A
Peak forward surge current @=1.0s	I_{FSM}	1.0	A
Power Dissipation	Pd	500	mW
Thermal	$R_{\theta JA}$	250	℃/W
Junction temperature	T_j	150	℃
Storage temperature	T_{STG}	-65~+150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ 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=0.1XI_R,R_L=100 Ω

1N4148W Typical Characteristics

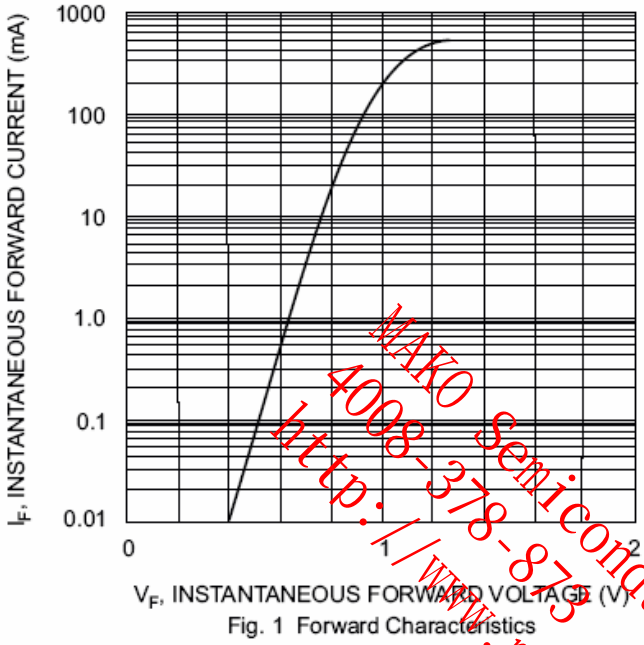


Fig. 1 Forward Characteristics

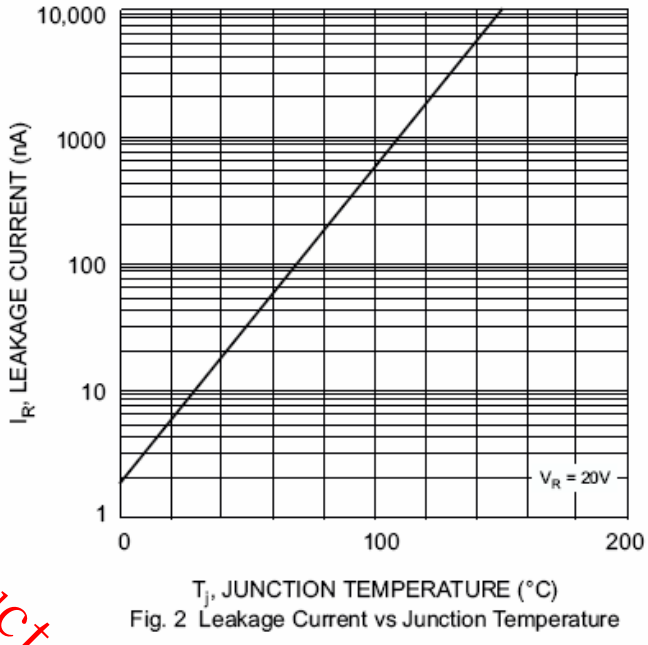


Fig. 2 Leakage Current vs Junction Temperature