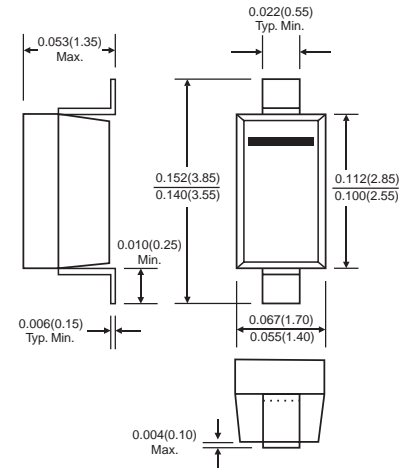




## SOD-123



Dimensions in inches and (millimeters)

## Features

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

## Mechanical Data

- ✧ Case: SOD-123, Molded Plastic
- ✧ Polarity: Cathode Band
- ✧ Marking: Date Code only or Date Code and Type Code  
Type Code: T4
- ✧ Weight: 0.01 grams (approx.)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

### Maximum Ratings

Type Number	Symbol	1N4148W	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current (Note 1)	$I_{FM}$	300	mA
Average Rectified Output Current (Note 1)	$I_O$	150	mA
Non-Repetitive Peak Forward Surge Current @ $t = 1.0\mu s$ @ $t = 1.0s$	$I_{FSM}$	2.0 1.0	A
Power Dissipation (Note 1)	$P_d$	350	mW
Thermal Resistance Junction to Ambient Air (Note 1)	$R_{\theta JA}$	357	K/W
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150	°C

### Electrical Characteristics

Type Number	Symbol	Min	Max	Unit	Test Condition
Maximum Forward Voltage	$V_{FM}$	—	0.715 0.855 1.0 1.25	V	$I_F = 1.0mA$ $I_F = 10mA$ $I_F = 50mA$ $I_F = 150mA$
Maximum Peak Reverse Current	$I_{RM}$	—	2.5 50 30 25	$\mu A$ $\mu A$ $\mu A$ nA	$V_R = 75V$ $V_R = 75V, T_j = 150^\circ C$ $V_R = 25V, T_j = 150^\circ C$ $V_R = 20V$
Junction Capacitance	$C_j$	—	2.0	pF	$V_R = 0, f = 1.0MHz$
Reverse Recovery Time	$t_{rr}$	—	4.0	ns	$I_F = I_R = 10mA,$ $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$

Notes: 1. Valid provided that terminals are kept at ambient temperature.

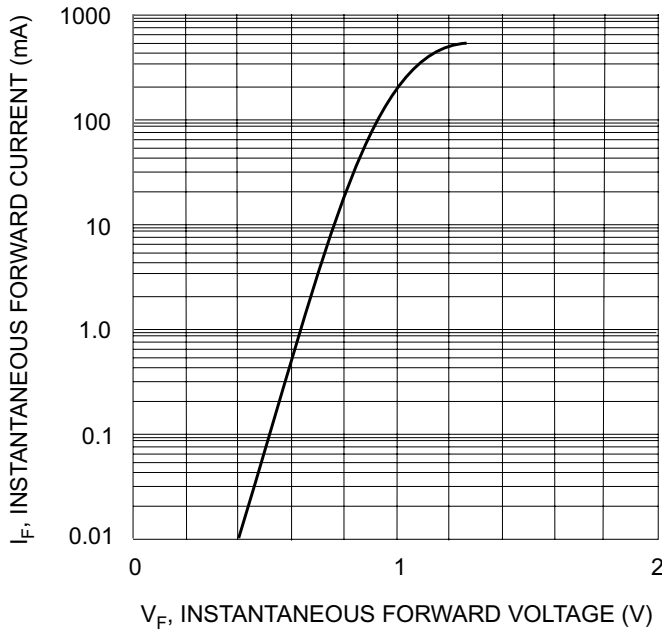


Fig. 1 Forward Characteristics

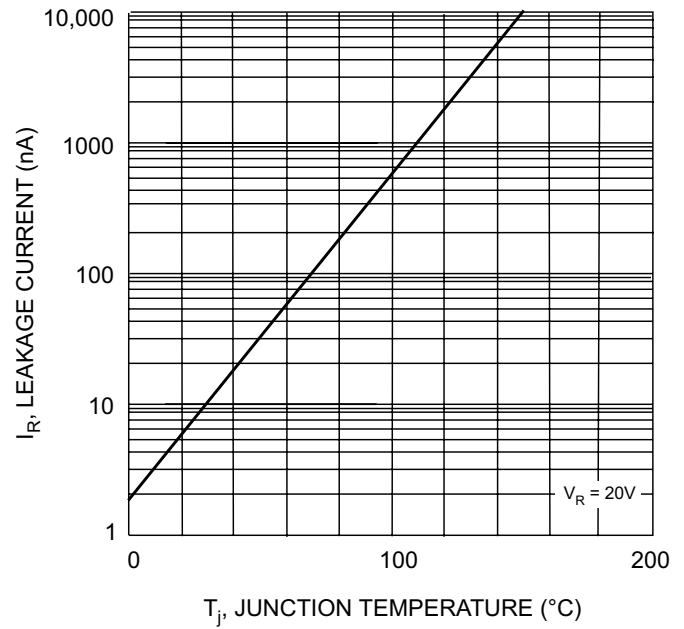


Fig. 2 Leakage Current vs Junction Temperature

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SOD-123	3000/REEL	90000	40X20X22	5.00	4.00