



400mW SOD-123 SURFACE MOUNT
Small Outline Flat Lead Plastic Package
General Purpose Application
Fast Switching Diode



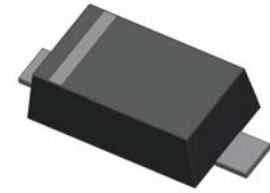
DEVICE MARKING CODE:

Device Type	Device Marking
1N4148WFL	D1

Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	400	mW
T_{STG}	Storage Temperature Range	-65 to +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	+150	$^\circ\text{C}$
V_{RSM}	Non-Repetitive Peak Reverse Voltage	100	V
V_{RRM}	Repetitive Peak Reverse Voltage	75	V
I_{FRM}	Repetitive Peak Forward Current	300	mA
I_O	Continuous Forward Current	150	mA
I_{FSM}	Peak Forward Surge Current	2.0	A

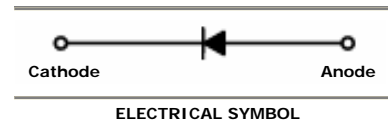
These ratings are limiting values above which the serviceability of the diode may be impaired.



SOD-123 Flat Lead

Specification Features:

- Fast Switching Device ($T_{RR} < 4.0$ nS)
- General Purpose Diodes
- Flat Lead SOD-123 Small Outline Plastic Package
- Surface Device Type Mounting
- Moisture Sensitivity Level 1
- Clip Bonding Construction, Good Thermal Capability
- Pb Free Version and RoHS Compliant & Halogen Free
- Matte Tin(Sn) Lead Finish with Nickel(Ni) Underplate
- Band Indicates Cathode

**Electrical Characteristics** $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
B_V	Breakdown Voltage	$I_R = 100\mu\text{A}$	100		Volts
		$I_R = 5\mu\text{A}$	75		
I_R	Reverse Leakage Current	$V_R = 20\text{V}$		25	nA
		$V_R = 75\text{V}$		5	μA
V_F	Forward Voltage	$I_F = 10\text{mA}$		1.0	Volts
T_{RR}	Reverse Recovery Time	$I_F = 10\text{mA}$ $I_R = 60\text{mA}$ $R_L = 100\Omega$ $I_{RR} = 1\text{mA}$		4	nS
C	Capacitance	$V_R = 0\text{V}, f = 1\text{MHz}$		4	pF

DEVICE CHARACTERISTICS

1N4148WFL

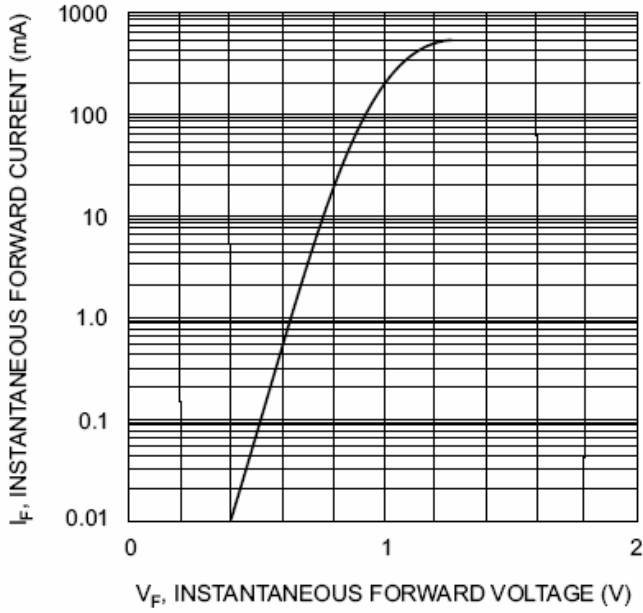


Fig. 1 Forward Characteristics

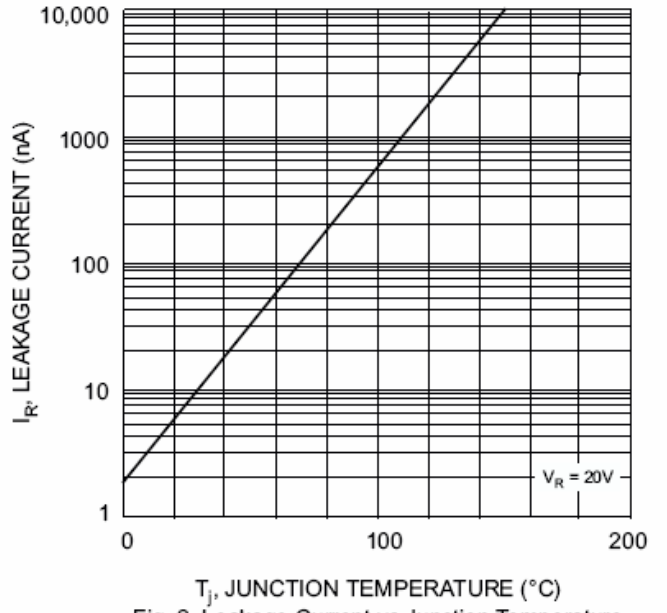
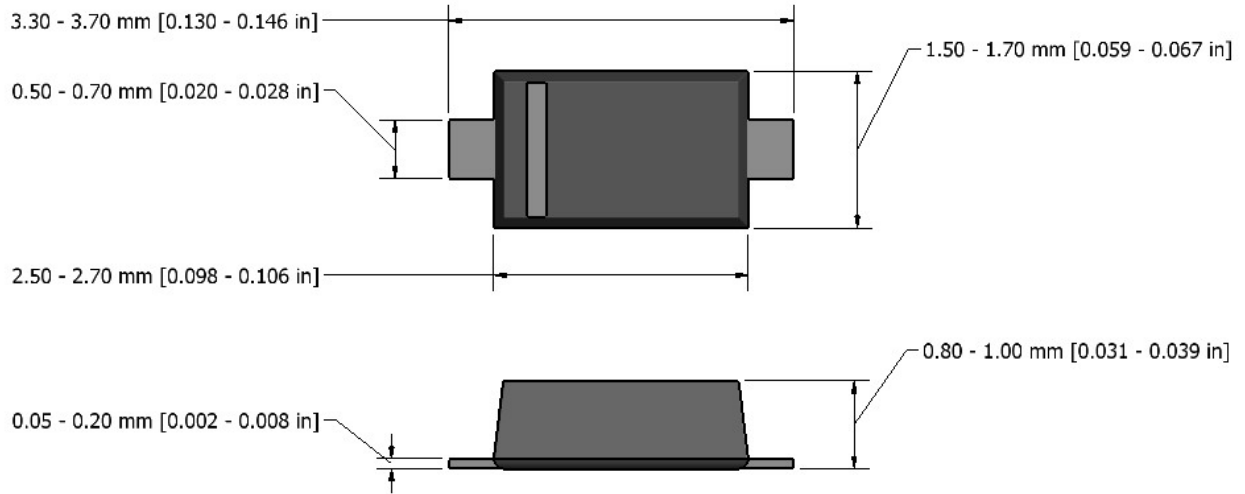


Fig. 2 Leakage Current vs Junction Temperature

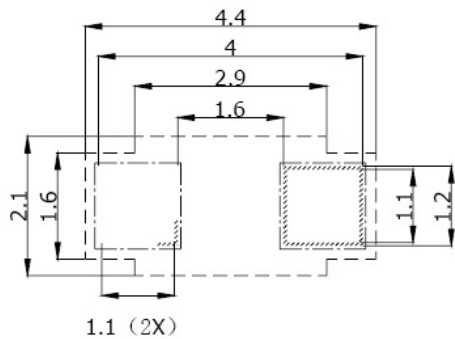
PACKAGE OUTLINE & DIMENSIONS

1N4148WFL

Flat Lead SOD-123 Package Outline



SOLDERING FOOTPRINT



-  Solder lands 焊接区
-  Solder resist 耐热区
-  Solder past 锡膏区
-  Occupied area 填满区