



# DATA SHEET

SEMICONDUCTOR

1N4448WFL-A

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



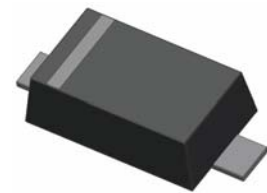
DEVICE MARKING CODE:

Device Type	Device Marking
1N4448WFL	D2

**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

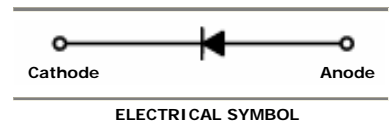
These ratings are limiting values above which the serviceability of the diode may be impaired.



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
- Matte Tin(Sn) Lead Finish with Nickel(Ni) Underplate
- Band Indicates Cathode
- AEC-Q101 qualified
  - Base P/N - RoHS compliant, commercial grade
  - Base P/N-A - RoHS compliant, AEC-Q101 qualified



**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	$\mu\text{A}$
$V_F$	Forward Voltage	$I_F = 5\text{mA}$	0.62	0.72	Volts
		$I_F = 100\text{mA}$		1.0	
$T_{RR}$	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

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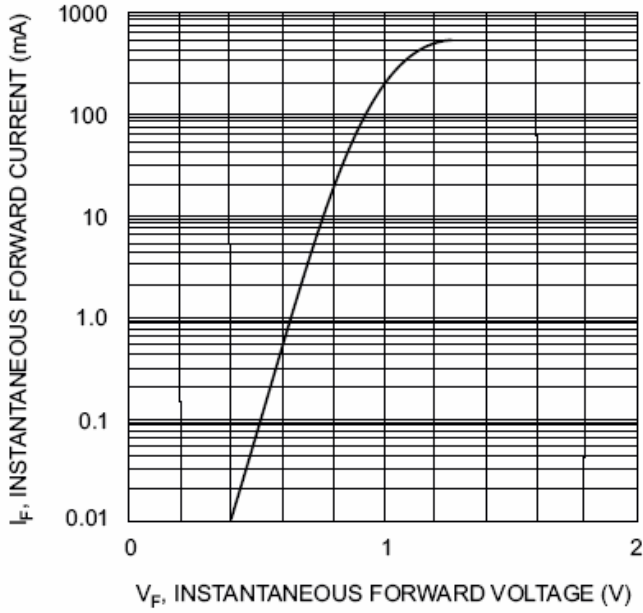


Fig. 1 Forward Characteristics

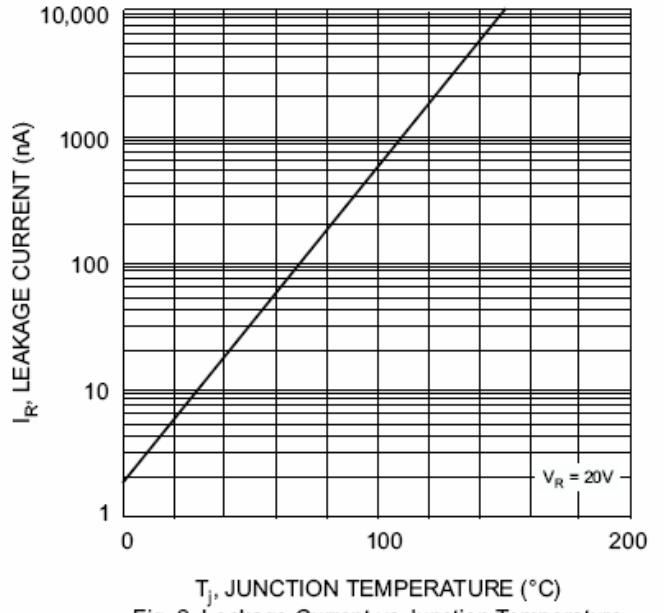


Fig. 2 Leakage Current vs Junction Temperature

# PACKAGE OUTLINE AND DIMENSIONS

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## Flat Lead SOD-123 Package Outline

