



## SWITCHING DIODE

# 1N4148W

VOLTAGE RANGE  
CURRENT

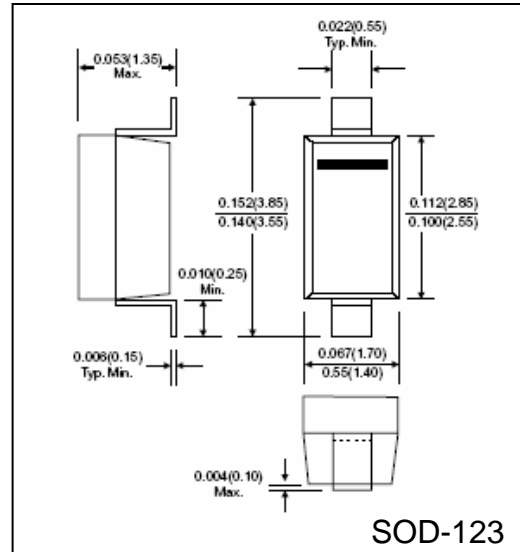
100 Volts  
150 mA

### FEATURES

- Silicon Epitaxial Planer Diode
- Fast Switching speed
- General purpose switching applications
- Also available in the DO-35 package as the 1N4148, And the Quadro MELF as the LS4148, and The Mini-MELF as the LL4148

### MECHANICAL DATA

- Case: SOD-123
- Terminals: Solderable per MIL-STD-202 Method 208C
- Polarity: Color band denotes cathode end
- Weight: 0.00035 ounce, 0.01 gram, approx.



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified

	SYMBOLS		UNIT
Non-Repetitive Peak Reverse Voltage	$V_R$	100	Volt
Maximum Repetitive Peak Reverse Voltage	$V_{RM}$	75	Volts
Forward Continuous Current	$I_{FM}$	300	mA
Non-Repetitive Peak Forward Surge Current @ $T = 1.0\mu S$ $T = 1.0S$	$I_{FSM}$	2.0 1.0	Amps
Maximum Forward Voltage @ 10mA	$V_F$	1.0	Volts
Maximum Leakage Current, (Note 1) @ $V_R = 75V$ $V_R = 70V, T_J = 150^\circ C$ $V_R = 20V, T_J = 150^\circ C$	$I_R$	5.0 50 30	$\mu A$
Maximum Reverse Recovery Time $I_F = 10mA, I_R = 10mA, I_{RR} = 1mA, R_L = 100\Omega$	$t_{rr}$	4	nS
Power dissipation (Note 1)	$P_{TOT}$	400	mW
Typical Junction Capacitance, $V_F = 1V, f = 1MHz$	$C_J$	4.0	pF
Typical Thermal Resistance	$R_{\theta JA}$	350	$^\circ C/W$
Operating Junction Temperature Range	$T_J$	(-65 to +175)	$^\circ C$
Storage Temperature Range	$T_{STG}$	(-65 to +175)	$^\circ C$

### Notes:

1. Valid provided terminals are kept at ambient temperature



## RATINGS AND CHARACTERISTIC CURVES 1N4148W

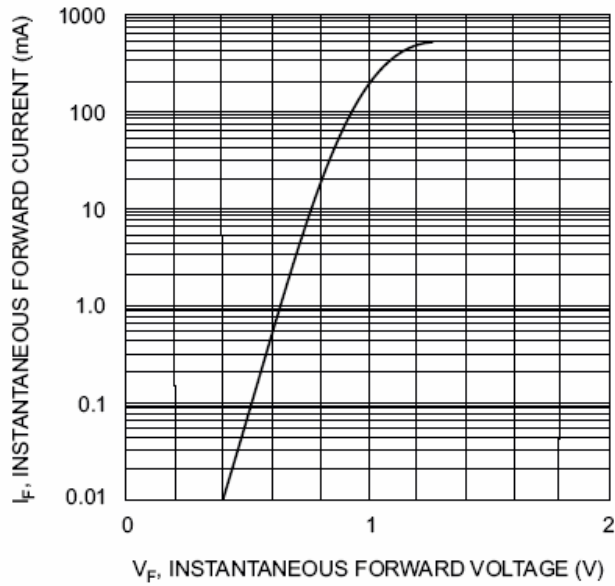


Fig. 1 Forward Characteristics

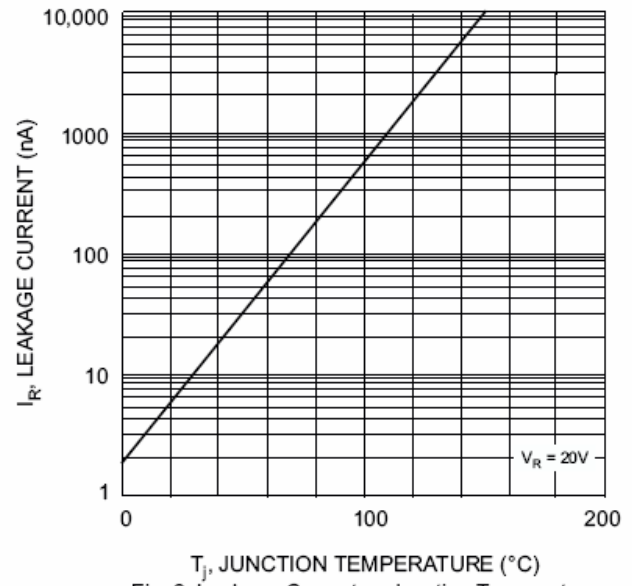


Fig. 2 Leakage Current vs Junction Temperature