

SWITCHING DIODE

1N4148

VOLTAGE RANGE
CURRENT

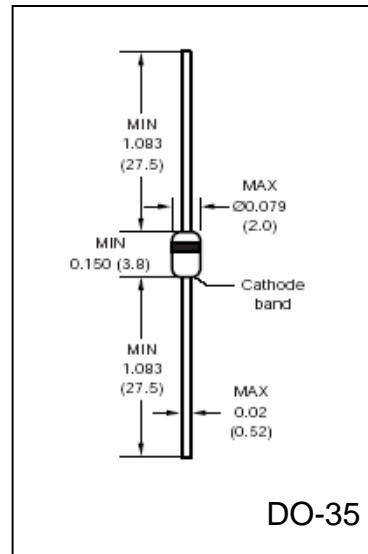
100 Volts
150 mA

FEATURES

- Silicon Epitaxial Planer Diode
- Fast Switching speed
- General purpose switching applications
- Also available in the SOD-123 package as the 1N4148W, And the Quadro MELF as the LS4148, and The Mini-MELF as the LL4148

MECHANICAL DATA

- Case: DO-35
- Leads: Axial, solderable per MIL-STD-202 Method 208C
- Polarity: Color band denotes cathode end
- Weight: 0.0045 ounce, 0.13 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	μA
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}	500	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 leads at a distance of 0.31" (8mm) from case are kept at ambient temperature



RATINGS AND CHARACTERISTIC CURVES 1N4148

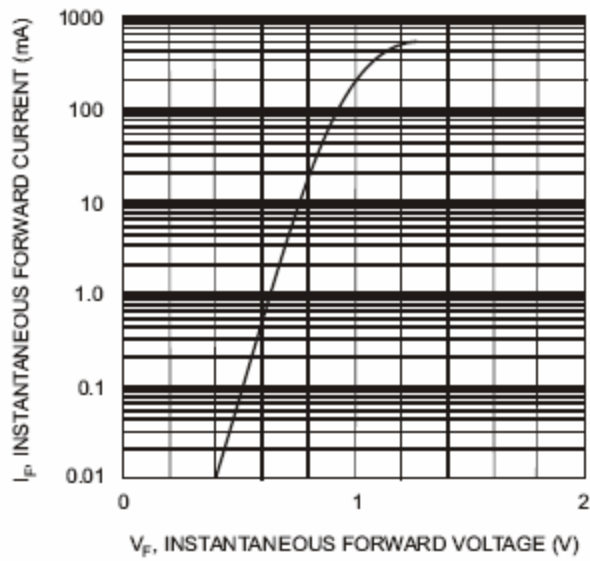


Fig. 1 Forward Characteristics

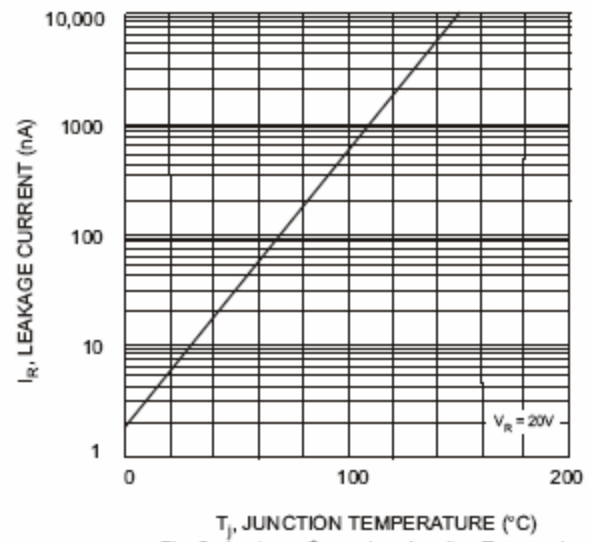


Fig. 2 Leakage Current vs Junction Temperature