



1N4148

Switching Diode

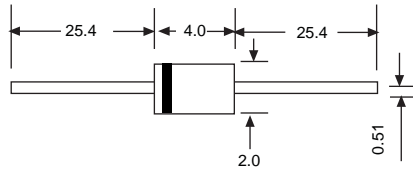
DO-35

Features

- *Fast switching speed
- *General purpose rectification
- *Silicon epitaxial planar construction

Mechanical Data

- *Cases:DO-35
- *Lead:Solderable per MIL- STD-202, Method 208
- *Polarity:Cathode band
- *Marking:Type number
- *Weight:0.13 grams (approx.)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Maximun Ratings

Type Number	Symbol	1N4148	Units
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}		
DC Block Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Average Rectifier Output Current	I_o	150	mA
Non-Repetitive Peak Forward Surge Current @ $t=10ms$	I_{FSM}	500	mA
Power Dissipation (Note 1)at $T_{amb}=25^{\circ}C$	P_d	500	mW
Thermal Resistance Junction to Ambient Air	R_{JA}	350	K/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175	$^{\circ}C$

Electrical Characteristics

Type Number	Symbol	Min	Max	Units
Forward Voltage @ $I_F=10mA$	V_F	-	1.0	V
Peak Reverse Current $V_R=75V$ $V_R=70V, T_J=150^{\circ}C$ $V_R=20V, T_J=150^{\circ}C$ $V_R=20V$	I_R	-	5.0 50 30 25	μA μA μA nA
Capacitance $V_R=0, f=1.0MHz$	C_j	-	4.0	pF
Reverse Recovery Time (Note 1)	t_{rr}	-	4.0	nS

NOTES: 1. Reverse Recovery Test Conditions: $I_F=10mA$ to $I_R=1.0mA$ $V_R=6.0V, R_{LI}=100^{\circ}$

RATING AND CHARACTERISTIC CURVES 1N4148



FIG.1-FORWARD CHARACTERISTICS CURVE

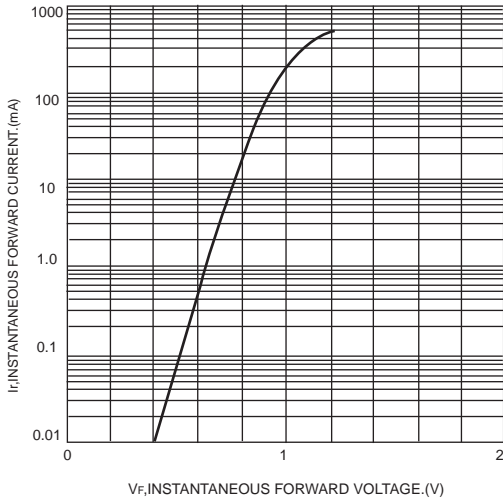


FIG.1-FORWARD CHARACTERISTICS CURVE

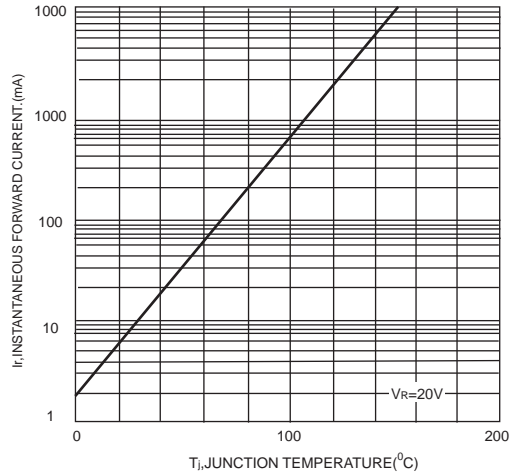


FIG.3-ADMISSIBLE POWER DISSIPATION VS AMBIENT TEMPERATURE

