

1N4148

Switching Diode

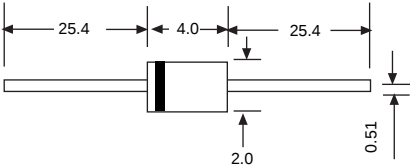
DO-35

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 Working Peak Reverse Voltage DC Block Voltage	V_{RRM} V_{RWM} V_R	75	V
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 Tamb=25°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	°C

Electrical Characteristics

Type Number	Symbol	Min	Max	Units
Forward Voltage @IF=10mA	V_F	-	1.0	V
Peak Reverse Current VR=75V VR=70V,Tj=150°C VR=20V,Tj=150°C VR=20V	I_R	-	5.0 50 30 25	uA uA uA nA
Capacitance VR=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:IF=10mA to IR=1.0mA VR=6.0V,RLI=100-

RATING AND CHARACTERISTIC CURVES
1N4148

FIG.1-FORWARD CHARACTERISTICS CURVE

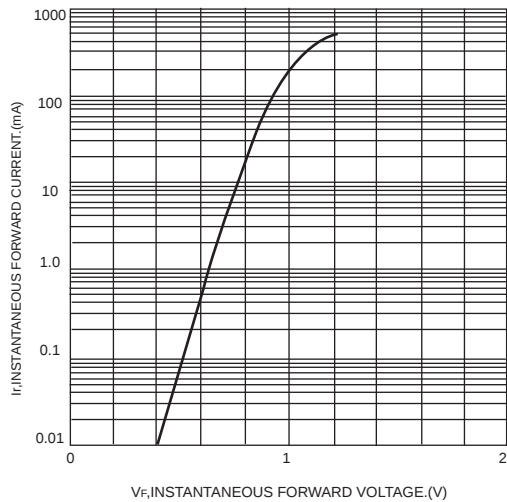


FIG.1-FORWARD CHARACTERISTICS CURVE

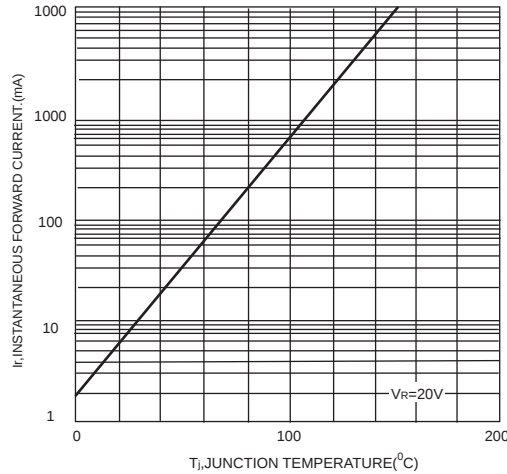


FIG.3-ADMISSIBLE POWER DISSIPATION VS
AMBIENT TEMPERATURE

