



1N4448W

Fast Switching Surface Mount Diode



Voltage Range
75 Volts
350m Watts Power Dissipation

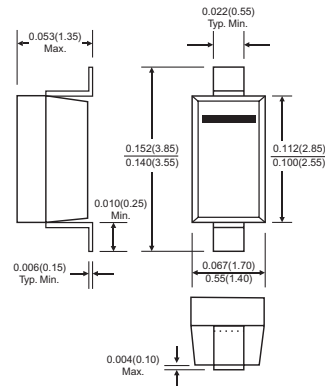
Features

- ✧ Fast switching speed
- ✧ Surface mount package ideally suited for automatic insertion
- ✧ For general purpose switching applications
- ✧ High conductance

Mechanical Data

- ✧ Case: SOD-123, Molded plastic
- ✧ Terminals: Solderable per MIL-STD-202, Method 208
- ✧ Polarity: Cathode Band
- ✧ Marking: Date Code and Type Code or Date Code only
Type Code: T5
- ✧ Weight: 0.01 gram (approx.)

SOD-123



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Type Number	Symbol	Value	Units
Non-Repetitive Peak Reverse Voltage	VRM	100	V
Peak Repetitive Reverse Voltage	VRRM	75	V
Working Peak Reverse Voltage	VRWM		
DC Blocking Voltage	VR	53	V
RMS Reverse Voltage	VR(RMS)		
Forward Continuous Current (Note 1)	IFM	500	mA
Average Rectifier Output Current (Note 1)	Io	250	mA
Non-Repetitive Peak Forward Surge Current @ t=1.0uS @ t=1.0S	IFSM	4.0 2.0	A
Power Dissipation (Note 1)	Pd	350	mW
Thermal Resistance Junction to Ambient Air (Note 1)	R θ JA	357	K/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to + 150	°C

Electrical Characteristics

Type Number	Symbol	Min	Max	Units
Forward Voltage IF=5.0mA IF= 10mA IF =100mA IF=150mA	V _F	0.62	0.72 0.855 1.0 1.25	V
Peak Reverse Current VR=75V VR=75V, Tj=150°C VR=25V, Tj=150°C VR=20V	I _R	—	2.5 50 30 25	uA nA
Junction Capacitance VR=0, f=1.0MHz	C _j	—	4.0	pF
Reverse Recovery Time (Note 2)	trr	—	4.0	nS

Notes: 1. Valid Provided that Terminals are Kept at Ambient Temperature.

2. Reverse Recovery Test Conditions: IF=IR=10mA, Irr=0.1 x IR, RL=100Ω.

RATINGS AND CHARACTERISTIC CURVES (1N4448W)

FIG.1- FORWARD CHARACTERISTICS

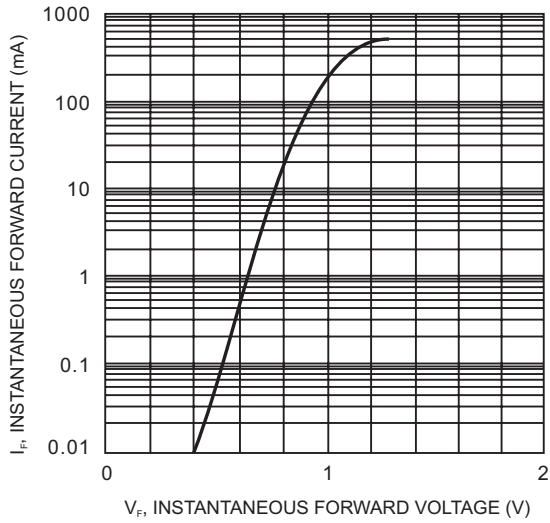


FIG.2- LEAKAGE CURRENT VS JUNCTION TEMPERATURE

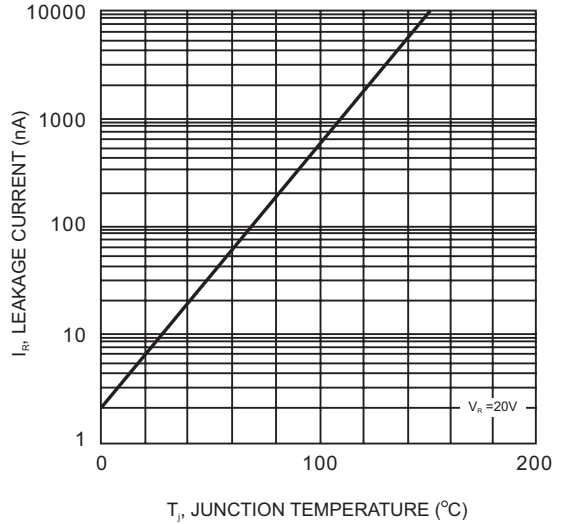


FIG.3- ADMISSIBLE POWER DISSIPATION VS AMBIENT TEMPERATURE

