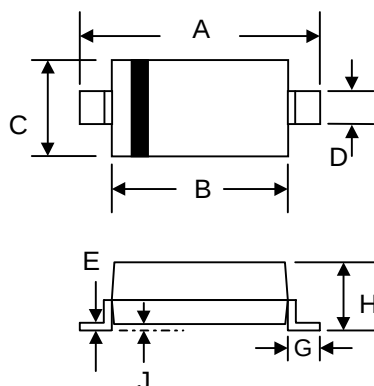


Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

Mechanical Data

- Case: SOD-123
- Type Code: T5
- Weight: 0.01 grams (approximate)



SOD-123		
Dim	Min	Max
A	3.6	3.9
B	2.5	2.8
C	1.4	1.8
D	0.5	0.7
E	—	0.2
G	0.4	—
H	0.95	1.35
J	—	0.12
All Dimensions in mm		

Maximum Ratings @T_A=25°C unless otherwise specified

Characteristic	Symbol	1N4448W	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Reverse Voltage	V _{RRM}	75	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current (Note 1)	I _{FM}	500	mA
Average Rectified Output Current (Note 1)	I _O	250	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0μs @ t = 1.0s	I _{FSM}	4.0 2.0	A
Power Dissipation (Note 1)	P _d	500	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	357	K/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	1N4448W	Unit
Forward Voltage Drop @ I _F = 5mA @ I _F = 10mA	V _{FM}	0.72 1.0	V
Peak Reverse Leakage Current @ V _R = 20V @ V _R = 75V	I _{RM}	25 5.0	nA μA
Typical Junction Capacitance (V _R = 0V DC, f = 1.0MHz)	C _j	4.0	pF
Reverse Recovery Time (Note 2)	t _{rr}	4.0	nS

Note: 1. Valid provided that terminals are kept at ambient temperature.
2. Measured with I_F = I_R = 10mA, I_{RR} = 0.1 x I_R, R_L = 100Ω.

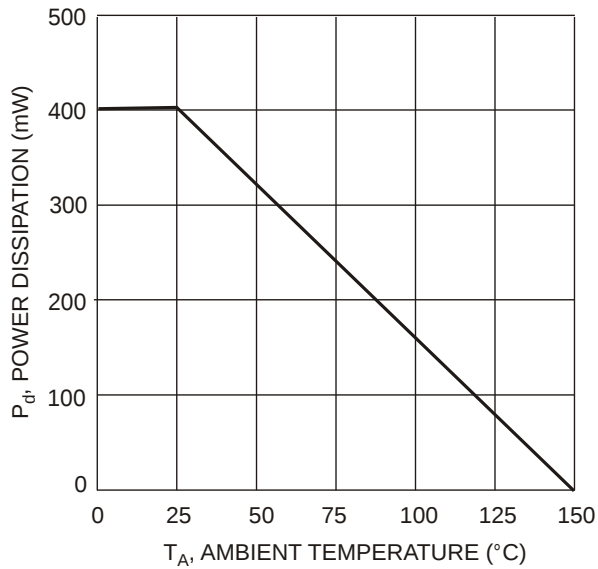


Fig. 1 Power Derating Curve

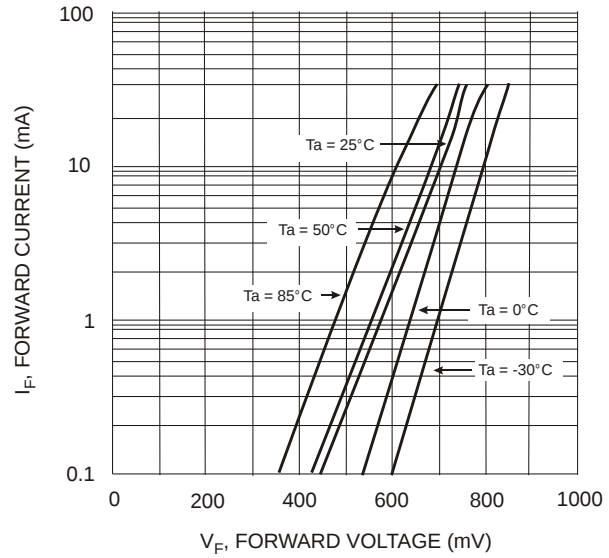


Fig. 2 Typical Forward Characteristics

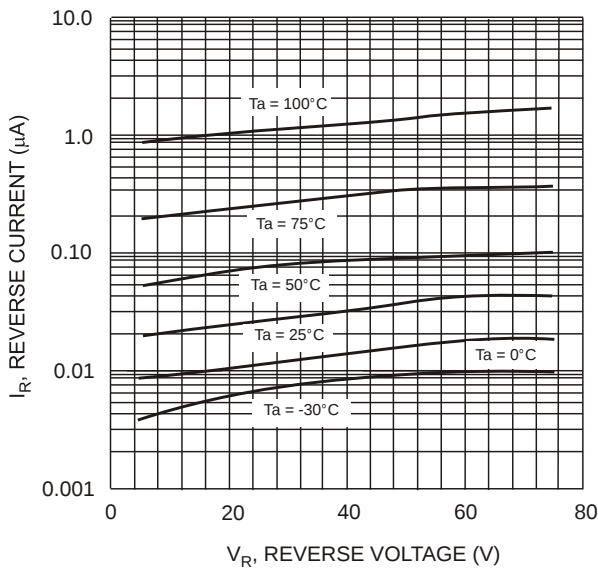


Fig. 3 Typical Reverse Characteristics

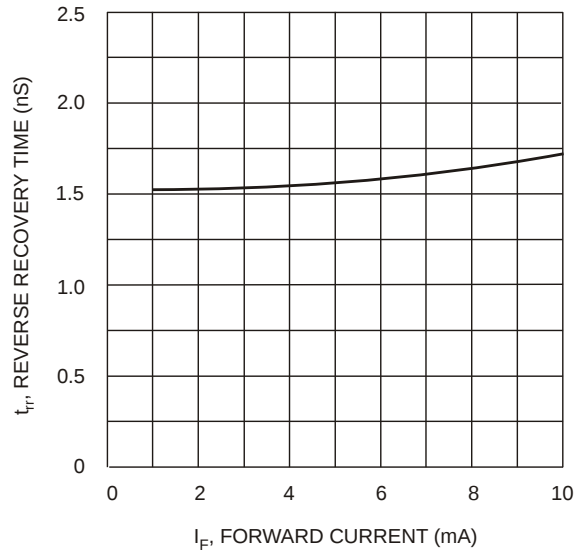


Fig. 4 Reverse Recovery Time vs. Forward Current

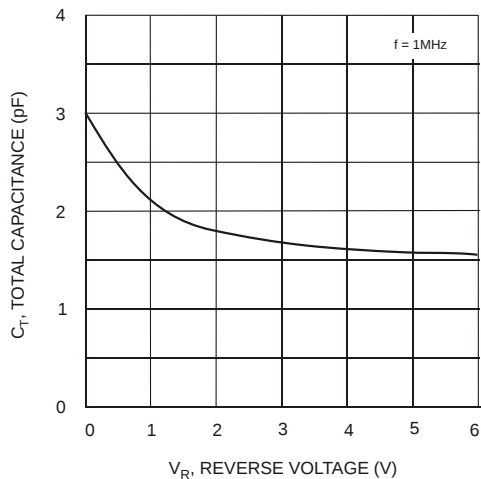


Fig. 5 Total Capacitance vs. Reverse Voltage