



DESCRIPTION

The 1N4448W is available in SOD-123 package.

FEATURE

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

MECHANICAL DATA

- Case: SOD-123
- Surface Mount Fast Switching Diode

PIN DESCRIPTION



SOD-123



ORDERING INFORMATION

Package Type	Part Number
SOD-123	1N4448W
Note	SPQ: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

PIN#	DESCRIPTION
1	CATHODE
2	ANODE

TYPICAL PERFORMANCE CHARACTERISTICS

Fig 1. Forward Characteristics

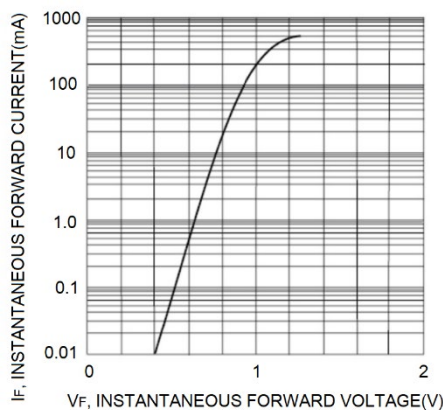
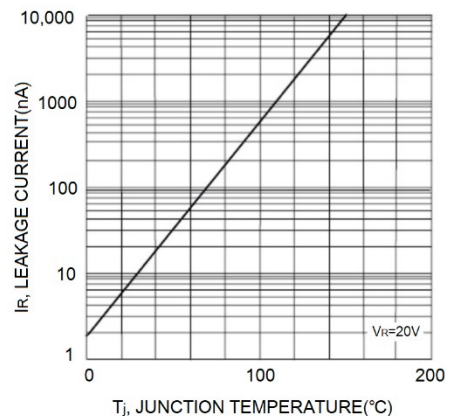


Fig 2. Leakage Current vs. Junction Temperature





ABSOLUTE MAXIMUM RATINGS

T_a = 25°C, unless otherwise specified

V _{RM} , Non-Repetitive Peak Reverse Voltage	100V
V _{RRM} , Peak Repetitive Reverse Voltage	75V
V _{RWM} , Working Peak Reverse Voltage	75V
V _R , DC Reverse Voltage	75V
V _{R(RMS)} , RMS Reverse Voltage	53V
I _{FM} , Forward Continuous Current	500mA
I _O , Average Rectified Output Current	250mA
I _{FSM} , Non-Repetitive Peak Forward	t=1.0μs 4A
Surge Current	t=1.0s 2A
P _d , Power Dissipation*	350mW
R _{θJA} , Thermal Resistance Junction to Ambient Air	357°C/W
T _J , Junction Temperature Range	-65°C ~ + 150°C
T _{STG} , Storage Temperature Range	-65°C ~ + 150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS

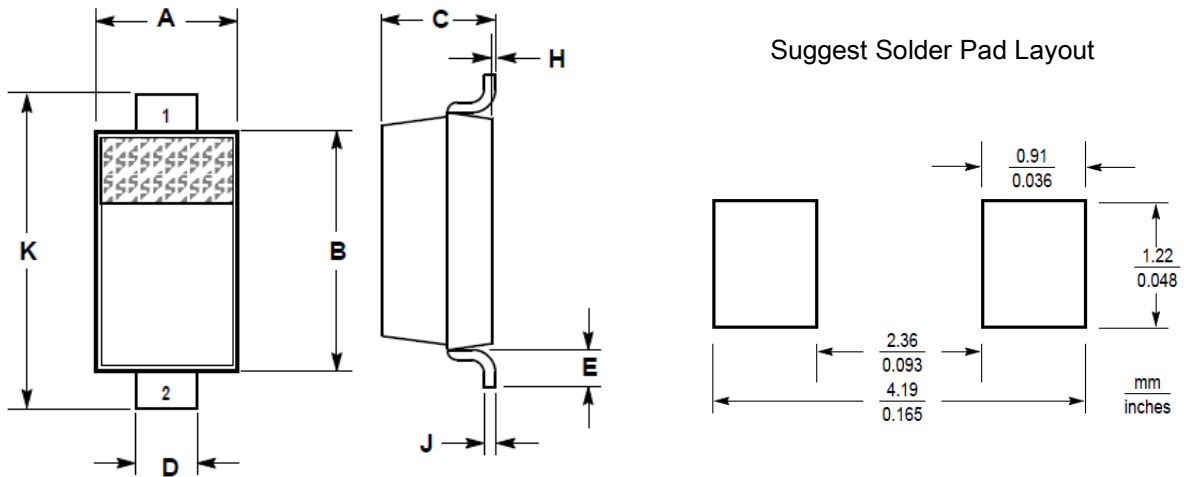
T_A = 25°C, unless otherwise specified

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	V _{(BR)R}	I _R = 1.0μA	75	-	-	V
Forward Voltage	V _{F1}	I _F = 5mA	0.620	-	0.720	V
	V _{F2}	I _F = 10mA	-	-	0.855	
	V _{F3}	I _F = 100mA	-	-	1.000	
	V _{F4}	I _F = 150mA	-	-	1.250	
Reverse Current	I _{R1}	V _R = 75V	-	-	2.5	μA
	I _{R2}	V _R = 20V	-	-	25	nA
Capacitance Between Terminals	C _T	V _R = 0, f = 1MHz	-	-	4	pF
Reverse Recovery Time	t _{rr}	I _F = I _R = 10 mA, I _{rr} = 0.1 x I _R , R _L = 100Ω	-	-	4	ns



PACKAGE INFORMATION

Dimension in SOD-123 Package



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.055	0.071	1.40	1.80
B	0.100	0.112	2.55	2.85
C	0.037	0.053	0.95	1.35
D	0.020	0.028	0.50	0.70
E	0.004	-	0.25	-
H	0.000	0.004	0.00	0.10
J	-	0.006	-	0.15
K	0.140	0.152	3.55	3.85



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