



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

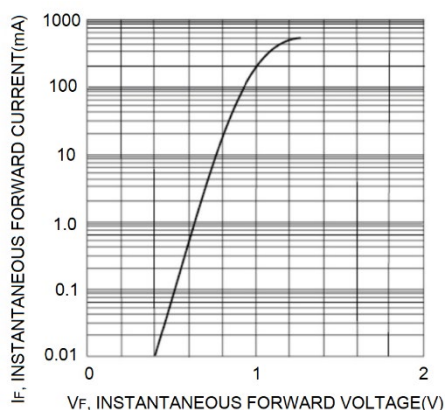
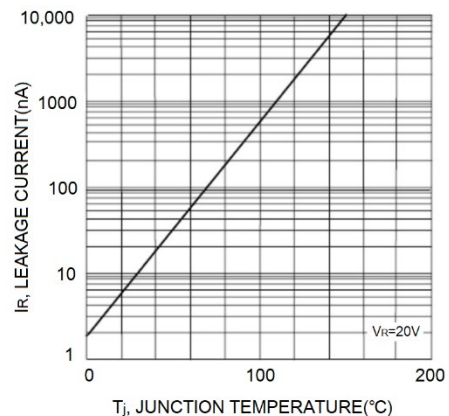


Fig 2. Leakage Current vs. Junction Temperature



**ABSOLUTE MAXIMUM RATINGS** $T_a = 25^{\circ}\text{C}$, 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	$t=1.0\mu\text{s}$	4A
Surge Current	$t=1.0\text{s}$	2A
P_d , Power Dissipation*		350mW
$R_{\theta JA}$, 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.

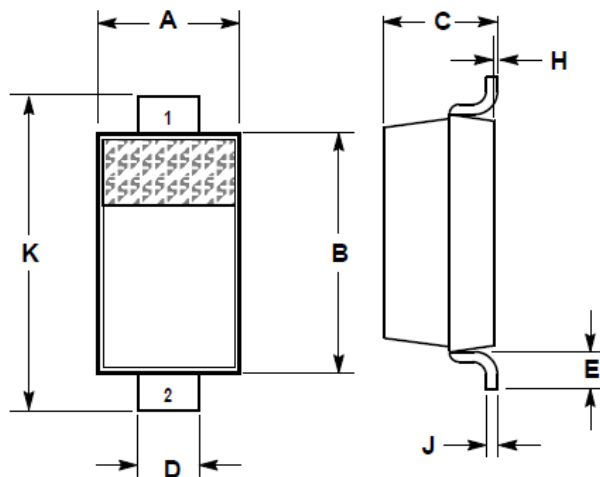
ELECTRICAL CHARACTERISTICS $T_A = 25^{\circ}\text{C}$, unless otherwise specified

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 1.0\mu\text{A}$	75	-	-	V
Forward Voltage	V_{F1}	$I_F = 5\text{mA}$	0.620	-	0.720	V
	V_{F2}	$I_F = 10\text{mA}$	-	-	0.855	
	V_{F3}	$I_F = 100\text{mA}$	-	-	1.000	
	V_{F4}	$I_F = 150\text{mA}$	-	-	1.250	
Reverse Current	I_{R1}	$V_R = 75\text{V}$	-	-	2.5	μA
	I_{R2}	$V_R = 20\text{V}$	-	-	25	nA
Capacitance Between Terminals	C_T	$V_R = 0, f = 1\text{MHz}$	-	-	4	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10\text{mA}$, $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$	-	-	4	ns

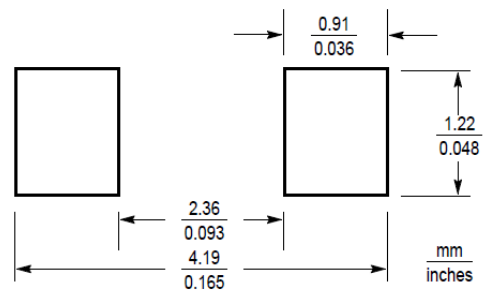


PACKAGE INFORMATION

Dimension in SOD-123 Package



Suggest Solder Pad Layout



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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