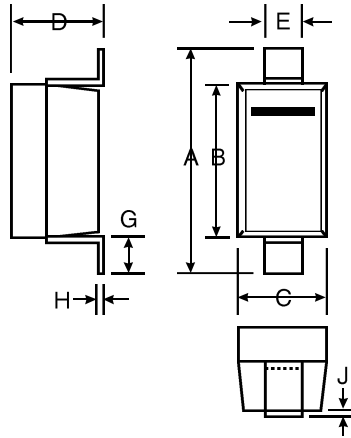


### Features

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  
 Weight: 0.01 grams (approx.)



SOD-123		
Dim	Min	Max
A	3.55	3.85
B	2.55	2.85
C	1.40	1.70
D	—	1.35
E	0.55 Typical	
G	0.25	—
H	0.15 Typical	
J	—	0.10
All Dimensions in mm		

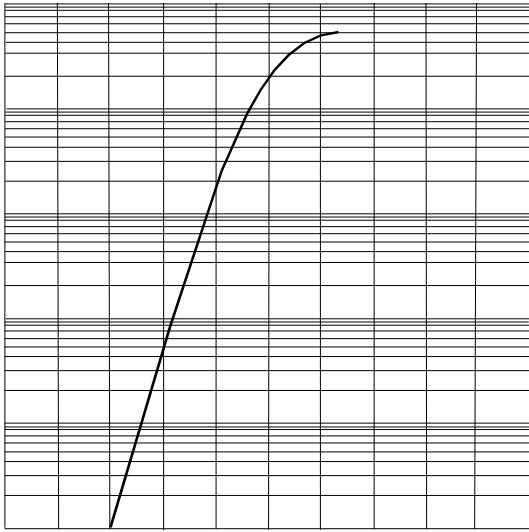
### Maximum Ratings @ $T_A = 25\text{ C}$ unless otherwise specified

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 @ $t = 1.0\text{ s}$ @ $t = 1.0\text{ s}$	$I_{FSM}$	4.0 2.0	A
Power Dissipation (Note 1)	$P_d$	350	mW
Thermal Resistance Junction to Ambient Air (Note 1)	$R_{JA}$	357	K/W
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +150	C

### Electrical Characteristics @ $T_A = 25\text{ C}$ unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Maximum Forward Voltage	$V_{FM}$	0.62	0.72 0.855 1.0 1.25	V	$I_F = 5.0\text{mA}$ $I_F = 10\text{mA}$ $I_F = 100\text{mA}$ $I_F = 150\text{mA}$
Maximum Peak Reverse Current	$I_{RM}$		2.5 50 30 25	A A A nA	$V_R = 75\text{V}$ $V_R = 75\text{V}, T_J = 150\text{ C}$ $V_R = 25\text{V}, T_J = 150\text{ C}$ $V_R = 20\text{V}$
Junction Capacitance	$C_j$		4.0	pF	$V_R = 0, f = 1.0\text{MHz}$
Reverse Recovery Time	$t_{rr}$		4.0	ns	$I_F = I_R = 10\text{mA}$ , $I_{rr} = 0.1 \times I_R, R_L = 100$

Notes: 1. Valid provided that terminals are kept at ambient temperature.



1