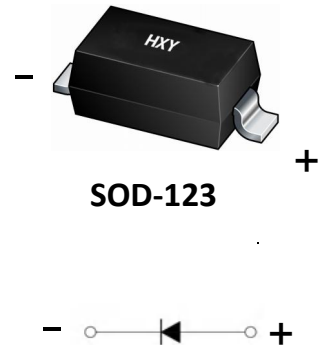




## FEATURES

- Average Rectified Forward Current:  $I_{F(AV)}=250$  mA
- Power Dissipation of 400mw



## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
1N4448W	SOD-123		3000

SOD-123

## MAXIMUM RATINGS (Ta=25 unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	100	V
Reverse Voltage	$V_R$	80	V
Average Rectified Forward Current	$I_{F(AV)}$	150	mA
Forward Continuous Current	$I_{FM}$	300	mA
Non-Repetitive Peak Forward Surge Current (at t = 1 $\mu$ s)	$I_{FSM}$	4	A
Power Dissipation	$P_d$	400	mW
Junction Temperature	$T_j$	150	$^{\circ}$ C
Storage Temperature Range	$T_{stg}$	- 65 to + 150	$^{\circ}$ C

## ELECTRICAL CHARACTERISTICS (Ta=25 unless otherwise specified)

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 5$ mA at $I_F = 10$ mA at $I_F = 100$ mA at $I_F = 150$ mA	$V_F$	0.62 - - -	0.72 0.855 1 1.25	V
Reverse Leakage Current at $V_R = 80$ V at $V_R = 20$ V at $V_R = 75$ V, $T_J = 150$ $^{\circ}$ C at $V_R = 25$ V, $T_J = 150$ $^{\circ}$ C	$I_R$	- - - -	100 25 50 30	nA nA $\mu$ A $\mu$ A
Reverse Breakdown Voltage at $I_R = 100$ $\mu$ A	$V_{(BR)R}$	80	-	V
Total Capacitance at $V_R = 0.5$ V, f = 1 MHz	$C_{tot}$	-	4	pF
Reverse Recovery Time at $I_F = I_R = 10$ mA, $I_{tr} = 0.1 \times I_R$ , $R_L = 100$ $\Omega$	$t_{rr}$	-	4	ns



### Typical Characteristics

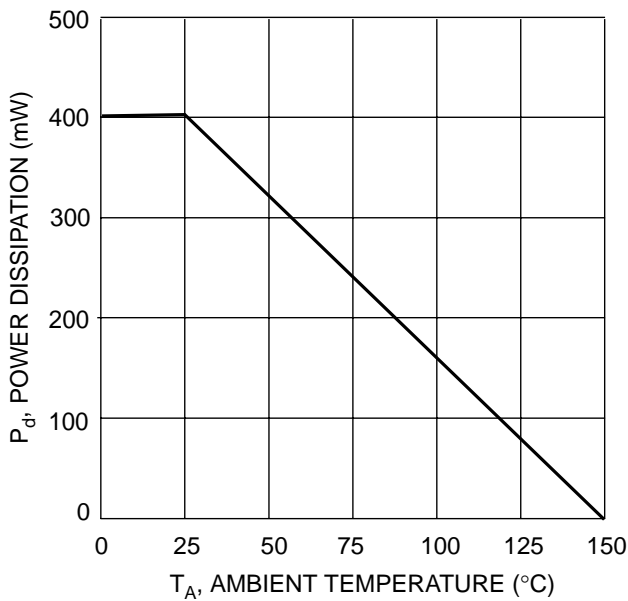


Fig. 1 Power Derating Curve

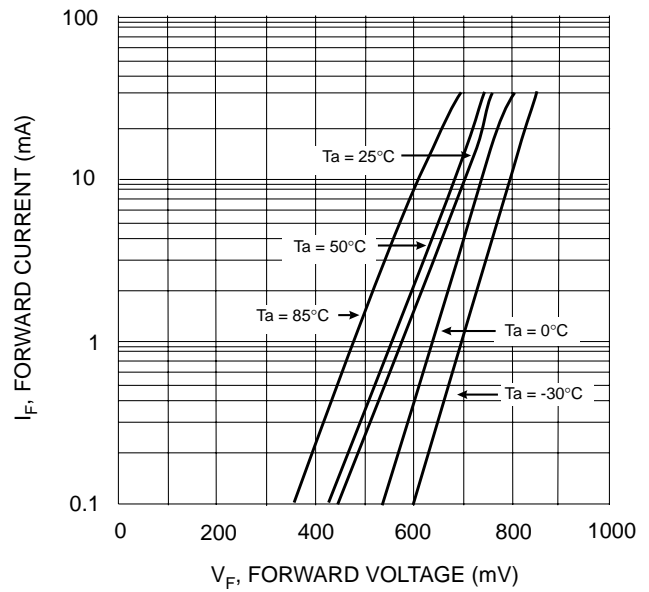


Fig. 2 Typical Forward Characteristics

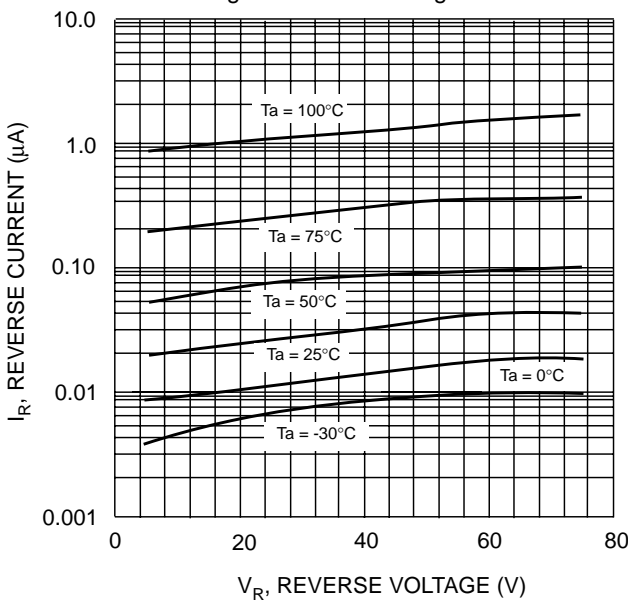


Fig. 3 Typical Reverse Characteristics

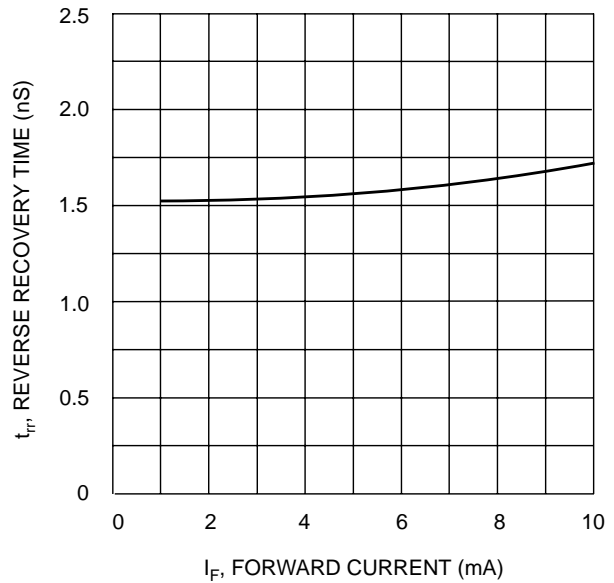


Fig. 4 Reverse Recovery Time vs. Forward Current

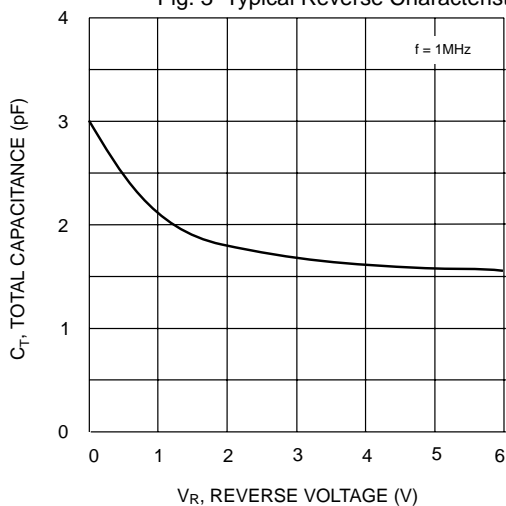
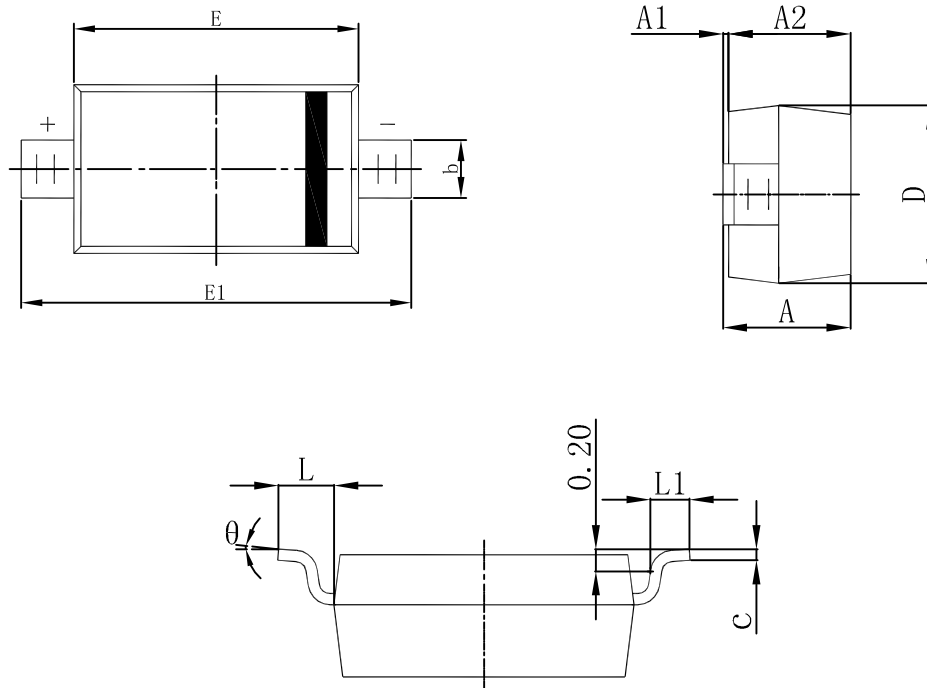


Fig. 5 Total Capacitance vs. Reverse Voltage



### SOD-123 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
$\theta$	0°	8°	0°	8°



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