



## Features

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* High surge current capability



SOD-123



## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
1N400xW	SOD-123	xA	3000

x: From to 1-7.

## Maxmim Ratings (Ta=25 unless otherwise noted)

Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Symbol	1A	2A	3A	4A	5A	6A	7A	Units
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Ta=75°C	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	25							A
Maximum Instantaneous Forward Voltage at 1.0A	1.1							V
Maximum DC Reverse Current Ta=25°C	5							μA
at Rated DC Blocking Voltage Ta=100°C	50							μA
Typical Junction Capacitance (Note 1)	11							pF
Typical Thermal Resistance R JA (Note 2)	90							°C/W
Operating and Storage Temperature Range Tj, Tstg	-65—+150							°C

### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Ambient.



## Typical Characteristics

Fig.1 Forward Current Derating Curve

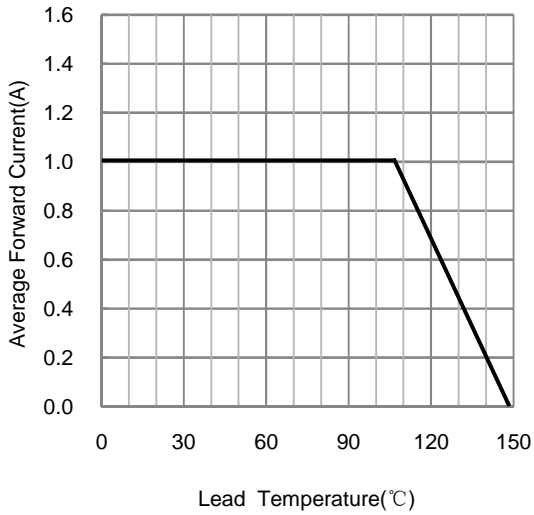


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

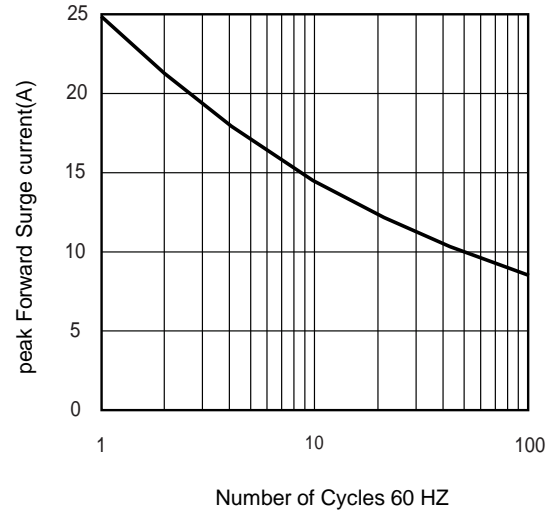


Fig.3 Typical Instantaneous Forward Characteristics

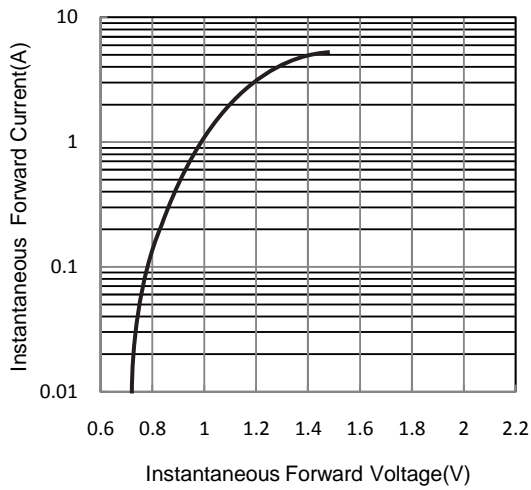
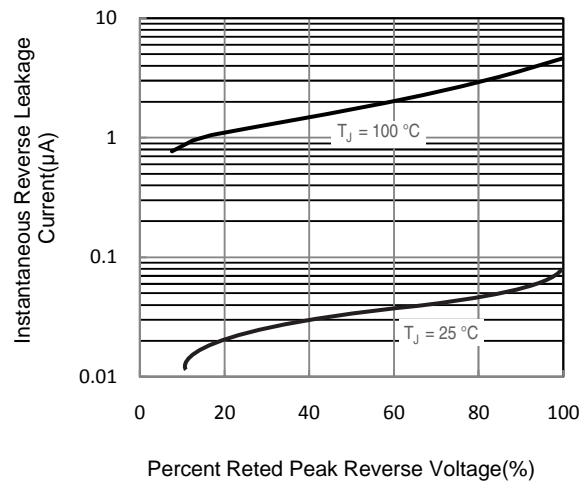
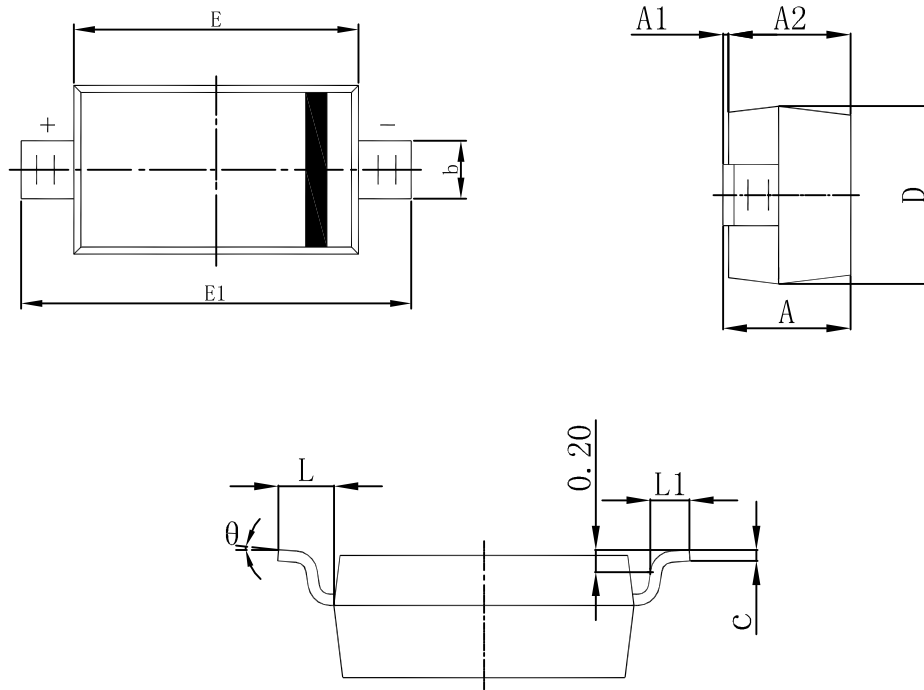


Fig.4 Typical Reverse Leakage Characteristics





**Package Outline Dimensions**  
**SOD-123**



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
θ	0°	8°	0°	8°



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