

#### **Features**

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



# **Package Marking and Ordering Information**

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

x: From to 1-7.

### Maximum 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						Α	
Peak Forward Surge Current, 8.3 ms single half sine-wave									
superimposed on rated load (JEDEC method)		25						Α	
Maximum Instantaneous Forward Voltage at 1.0A		1.1						V	
Maximum DC Reverse Current	Ta=25°C				5				μА
at Rated DC Blocking Voltage	Ta=100°C	50		μА					
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

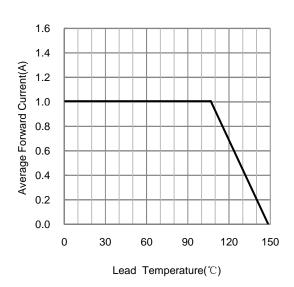


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

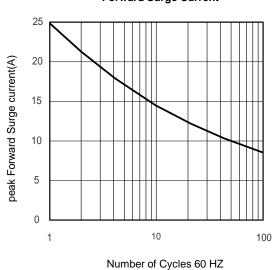


Fig.3 Typical Instantaneous Forward Characteristics

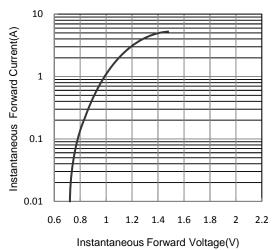
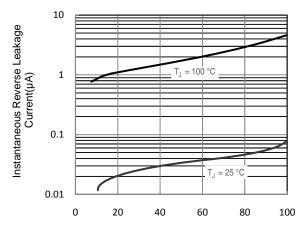


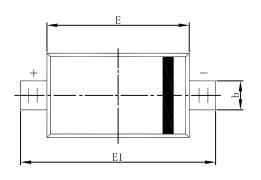
Fig.4 TypicI Reverse Leakage Characteristics

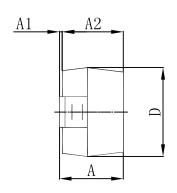


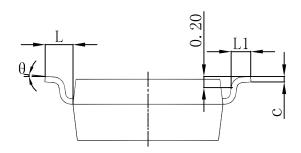
Percent Reted Peak Reverse Voltage(%)



# **Package Outline Dimensions** SOD-123







Symbol	Dimensions In Millimeters		Dimensions In Inches		
	Min	Max	Min	Max	
Α	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	
С	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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