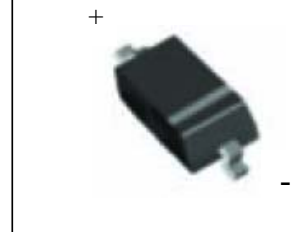


## SOD-123 Plastic-Encapsulate Diodes

### FEATURES

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

**SOD-123**


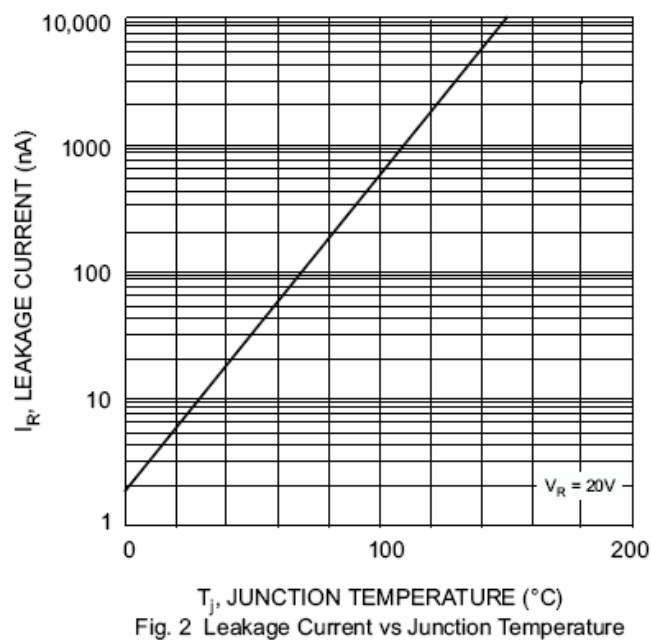
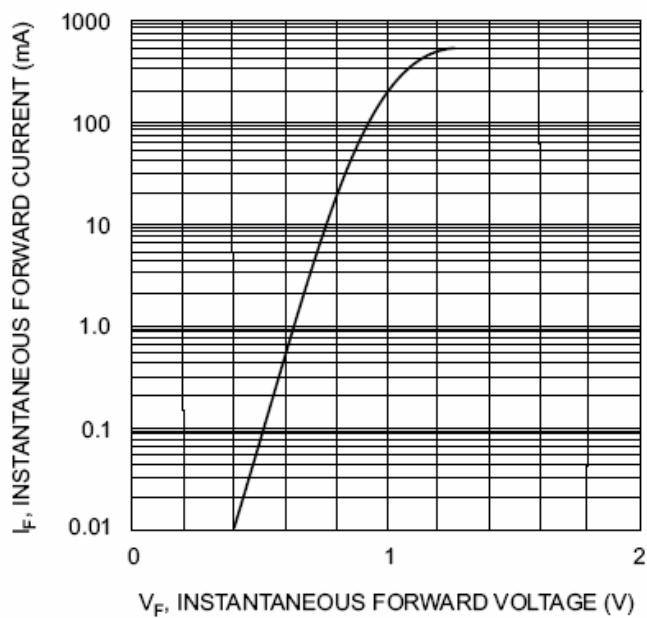
### Maximum Ratings and Electrical Characteristics, Single Diode @T<sub>A</sub>=25°C

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	V <sub>RM</sub>	100	V
Peak Repetitive Peak reverse voltage	V <sub>RRM</sub>	75	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>R</sub>		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	53	V
Forward Continuous Current	I <sub>FM</sub>	300	mA
Average Rectified Output Current	I <sub>O</sub>	150	mA
Peak forward surge current @=1.0μs	I <sub>FSM</sub>	2.0	A
@=1.0s		1.0	
Power Dissipation	P <sub>d</sub>	400	mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	315	°C/W
Junction temperature	T <sub>J</sub>	125	°C
Storage temperature	T <sub>STG</sub>	-65~+150	°C

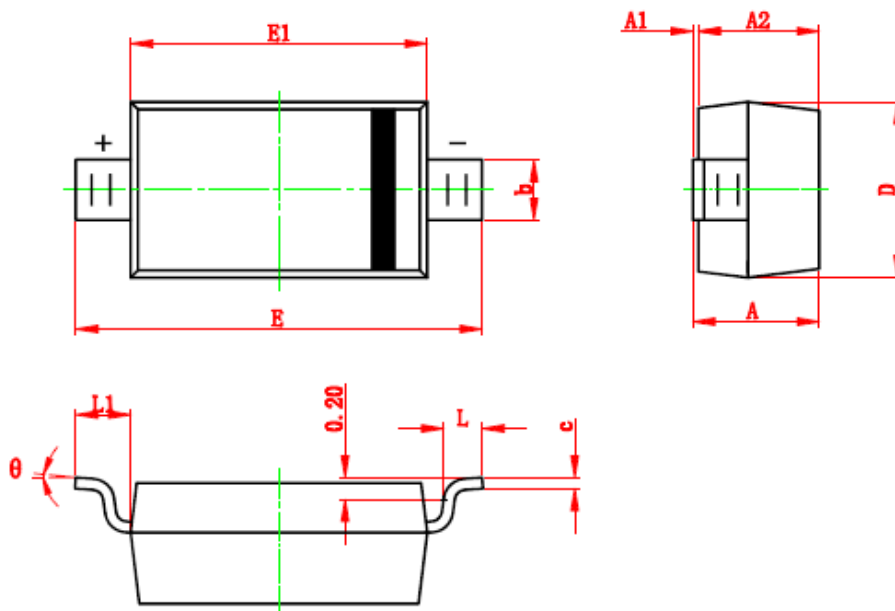
### Electrical Ratings @T<sub>A</sub>=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V <sub>F1</sub>			0.715	V	I <sub>F</sub> =1mA
	V <sub>F2</sub>			0.855	V	I <sub>F</sub> =10mA
	V <sub>F3</sub>			1.0	V	I <sub>F</sub> =50mA
	V <sub>F4</sub>			1.25	V	I <sub>F</sub> =150mA
Reverse current	I <sub>R1</sub>			1	μA	V <sub>R</sub> =75V
	I <sub>R2</sub>			25	nA	V <sub>R</sub> =20V
Capacitance between terminals	C <sub>T</sub>			2	pF	V <sub>R</sub> =0V, f=1MHz
Reverse Recovery Time	t <sub>rr</sub>			4	ns	I <sub>F</sub> =I <sub>R</sub> =10mA I <sub>rr</sub> =0.1X I <sub>R</sub> , R <sub>L</sub> =100Ω

## Typical Characteristics



# 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	3.550	3.850	0.140	0.152
E1	2.600	2.800	0.102	0.110
L	0.250	0.450	0.010	0.018
L1	0.500 REF.		0.020 REF.	
θ	0°	8°	0°	8°