Switching Diodes
500mW SOD-123

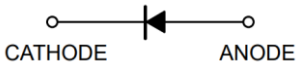
1N4448W

MERITEK

FEATURE

- Power Dissipation: 500mW
- 100V Peak Reverse Voltage
- 150mA Average Forward Current
- Fast Switching Speed
- Electrically Identical to Standard JEDEC
- High Conductance

MECHANICAL DATA



- Case: SOD-123, Molded Plastic
- Terminals: Solderable per MIL-STD, Method 2026
- Polarity: Color Band Denotes Cathode End

RoHS

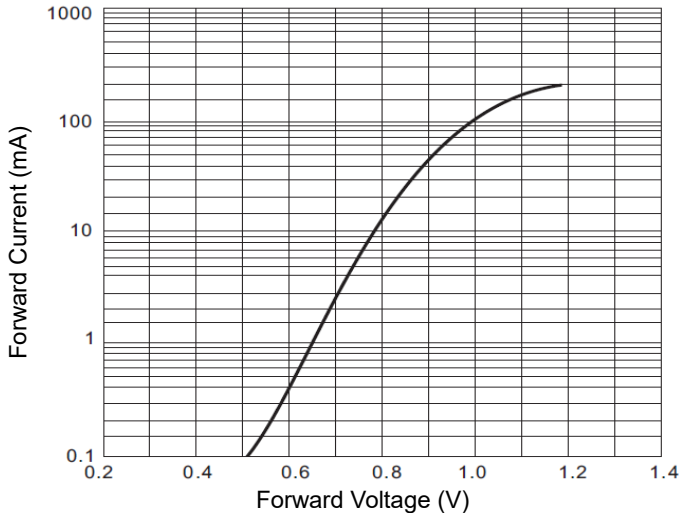
MAXIMUM RATING

Parameter		Symbol	Value	Units
Reverse Voltage		V_R	75	V
Peak Reverse Voltage		V_{RM}	100	V
RMS Voltage		V_{RMS}	50	V
Forward Continuous		I_{FM}	500	mA
Maximum DC Blocking Voltage		V_{DC}	75	V
Maximum Average Forward Current at T_A=25˚C		$I_{F(AV)}$	150	mA
Peak Forward Surge Current, 1.0μs		I_{FSM}	4.0	A
Power Dissipation Derate above 25˚C		P_{TOT}	500	mW
Maximum Forward Voltage	I_F=5mA	V_F	0.72	V
	I_F=100mA		1.00	V
Maximum DC Reverse Current at V_R=75V, T_J=25°C		I_R	2.5	μA
Junction Capacitance		C_J	4.0	pF
Maximum Reverse Recovery		T_{RR}	4.0	ns
Typical Thermal Resistance		$R_{\Theta JA}$	450	°C/W
Operating and Storage Temperature Range		T_J, T_{STG}	-55~150	°C

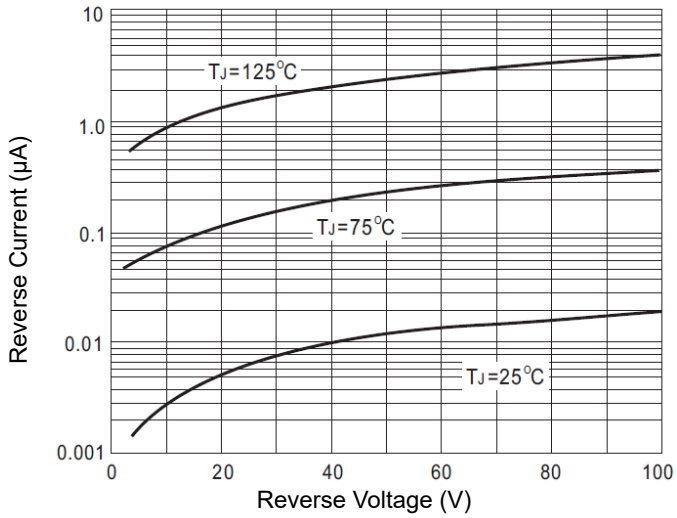
Note:
1. T_J = 25°C unless otherwise specified.
2. C_J at V_R=0, f=1MHz.
3. From I_F=10mA to I_R=1mA, V_R=6V, R_L=100Ω.

CHARACTERISTIC CURVES

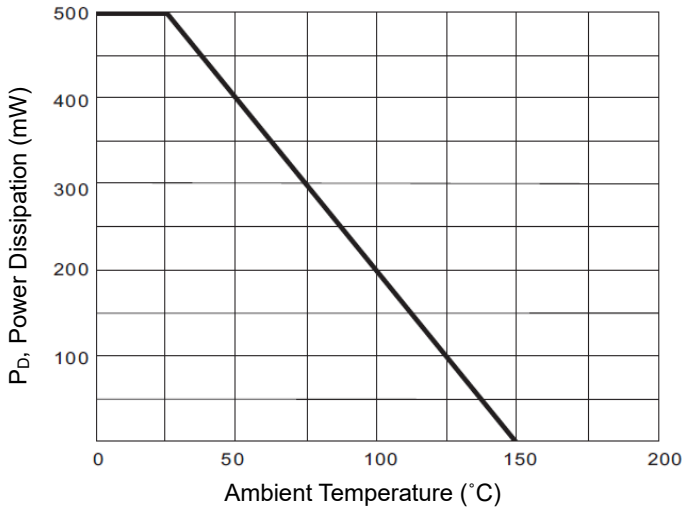
Typical Forward Characteristics



Typical Reverse Characteristics



Power Derating Curve



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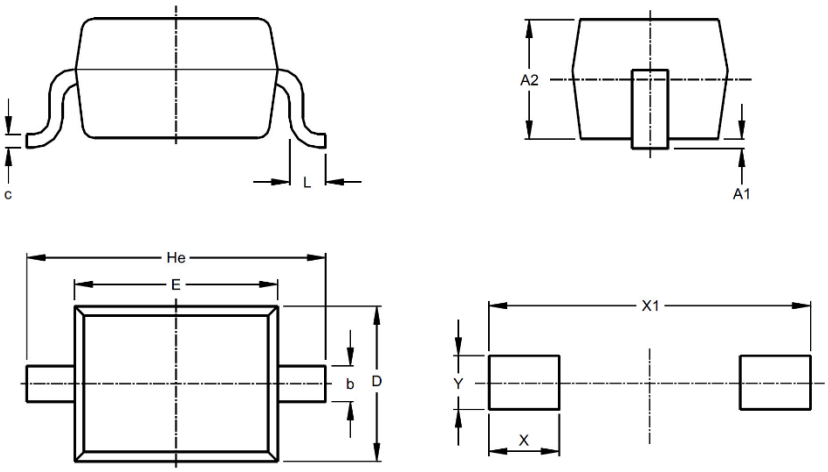
DIMENSIONS

SOD-123	Min (mm)	Max (mm)
A1	-	0.12
A2	0.95	1.35
b	0.50	0.70
C	-	0.20
D	1.40	1.80
E	2.50	2.80
He	3.60	3.90
L	0.40	-
X	0.97	
X1	4.25	
Y	1.22	



*Specifications subject to change without notice.