



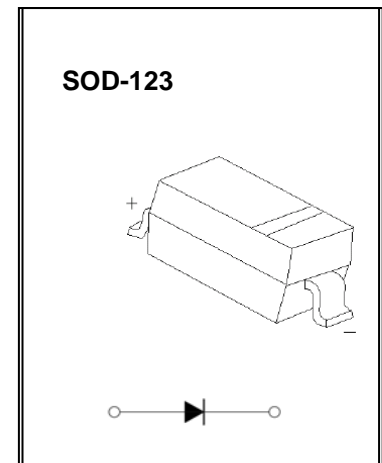
SOD-123 Plastic-Encapsulate Diodes

1N4448W

FAST SWITCHING DIODE

FEATURES

- **Fast Switching Speed**
- **Surface Mount Package Ideally Suited for Automatic Insertion**
- **For General Purpose Switching Applications**
- **High Conductance**
- **Pb-Free package is available**
RoHS product for packing code suffix "G"
Halogen free product for packing code suffix "H"
- **Moisture Sensitivity Level 1**
- **Polarity:** Color band denotes cathode end



MARKING: T5 & A3

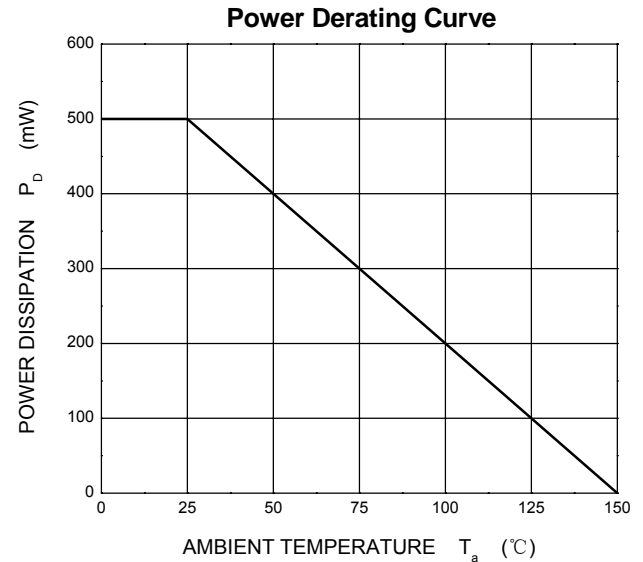
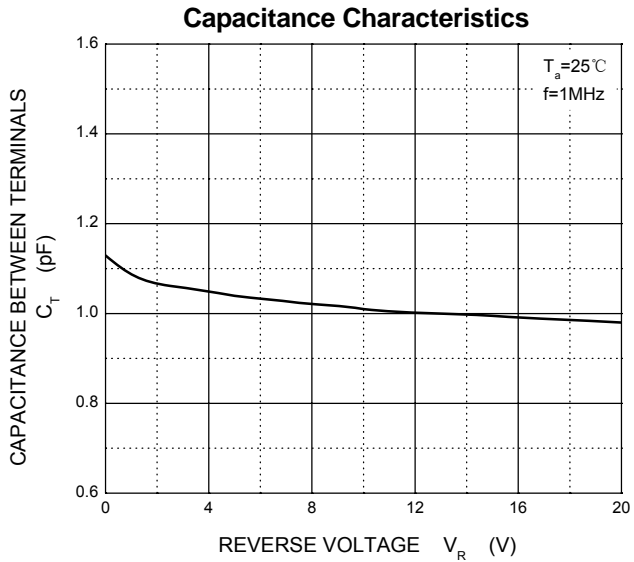
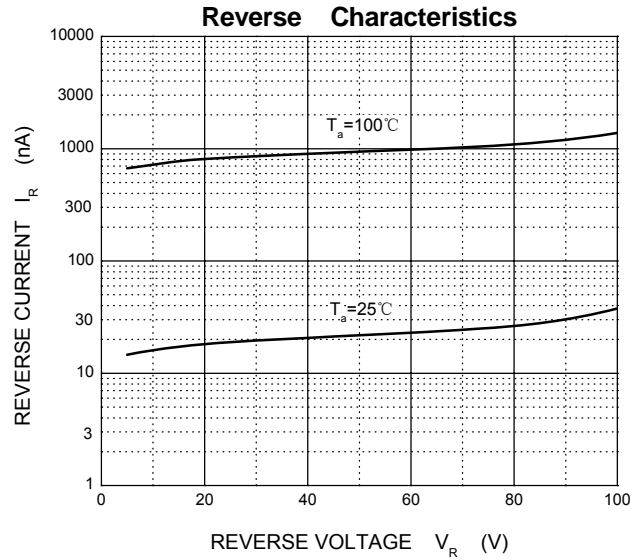
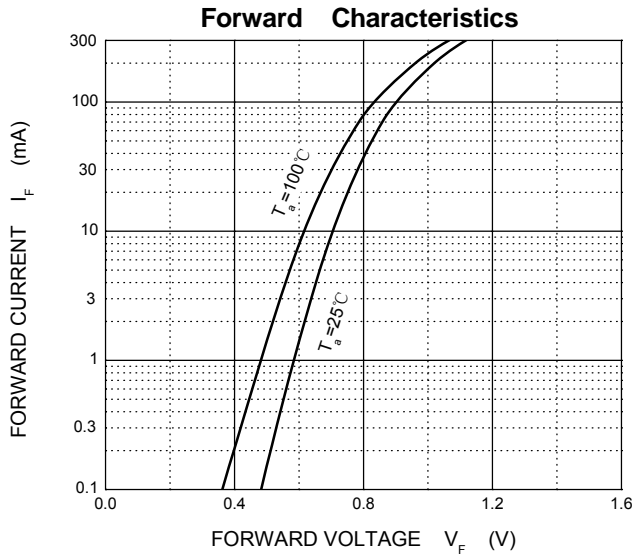
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	500	mA
Average Rectified Output Current	I_O	250	mA
Peak Forward Surge Current @t=1.0µs	I_{FSM}	4.0	A
@t=1.0s		1.5	
Power Dissipation	P_d	500	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	250	°C/W
Storage Temperature and Junction Temperature	T_{STG}/T_j	-55~+150	°C

Electrical Ratings @Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	75			V	$I_R=10\mu A$
Forward Voltage	V_{F1}	0.62		0.72	V	$I_F=5mA$
	V_{F2}			0.855	V	$I_F=10mA$
	V_{F3}			1.0	V	$I_F=100mA$
	V_{F4}			1.25	V	$I_F=150mA$
Reverse Current	I_{R1}			2.5	µA	$V_R=75V$
	I_{R2}			25	nA	$V_R=20V$
Capacitance Between Terminals	C_T			4	pF	$V_R=0V, f=1MHz$
Reverse Recovery Time	t_{rr}			4	ns	$I_F=I_R=10mA$ $I_{rr}=0.1I_R, R_L=100\Omega$

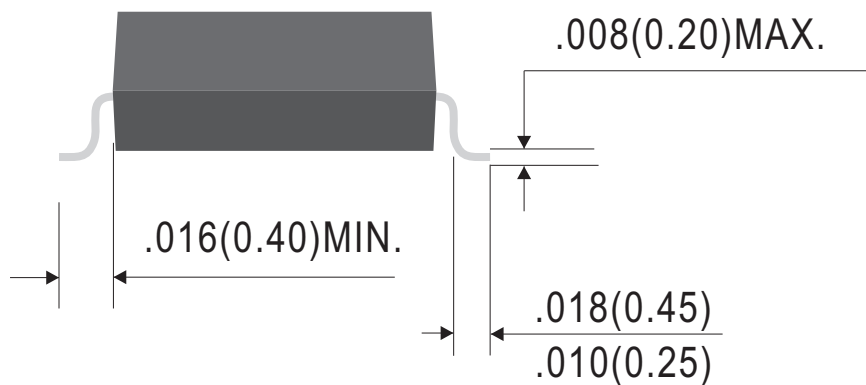
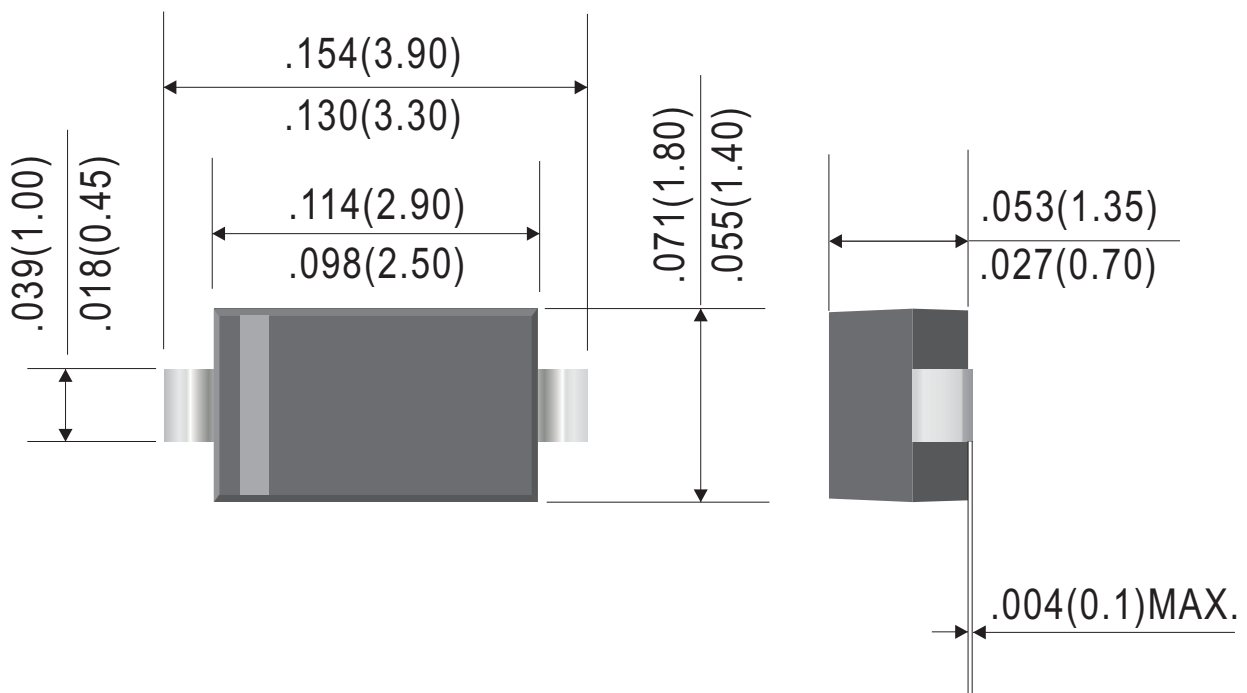
Typical Characteristics





Outline Drawing

SOD-123



Dimensions in inches and (millimeters)