Technical Data
Data Sheet N0578, Rev. -

Green Products

1N4448W
SURFACE MOUNT FAST SWITCHING DIODE

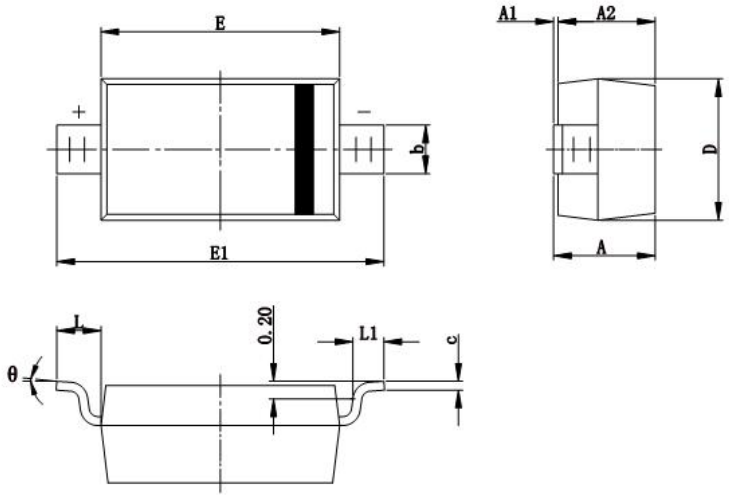
Features:

- **High Conductance**
- **Fast Switching**
- **Surface Mount Package Ideally Suited for Automatic Insertion**
- **For General Purpose and Switching Application**
- **Plastic Material –UL Recognition Flammability Classification 94V-O**
- **This is a Pb − Free Device**
- **All SMC parts are traceable to the wafer lot**
- **Additional testing can be offered upon request**

Mechanical Data：

- **Case: SOD-123, Molded Plastic**
- **Terminals: Plated leads Solderable per MIL-STD-202, Method 208**
- **Polarity: Cathode Band**
- **Weight: 0.01 grams(approx.)**
- **Marking: T5**

Mechanical Dimensions: In mm / Inches



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°

SOD-123(CJ)

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Ordering Information:

Device	Package	Shipping
1N4448W	SOD-123(Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings @T_A=25°C unless otherwise specified

Characteristic	Symbol	1N4448W	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
RSM Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current(Note 1)	I_F	500	mA
Average Rectified Output Current(Note 1)	Io	250	mA
Peak Forward Surge Current @t=1.0us @t=1.0s	I_{FSM}	4.0 2.0	A
Power Dissipation(Note 1)	P_d	500	mW
Typical Thermal Resistance, Junction to Ambient Air(Note 1)	$R_{\theta JA}$	357	K/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150	°C

Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic		Symbol	1N4448W	Unit
Forward Voltage	@I_F= 5mA @I_F=10mA	V_{FM}	0.72 1.0	V
Reverse Leakage Current	@V_R=20V @V_R=75V	I_{RM}	25 5.0	nA uA
Junction Capacitance (V_R=0V, f=1.0MHz)		C_j	4.0	pF
Reverse Recovery Time(Note 2)		t_{rr}	4.0	ns

Note: 1. Valid provided that terminals are kept at ambient temperature.
2. Measured with I_F=I_R=10mA, I_{RR}=0.1×I_R, R_L=100Ω

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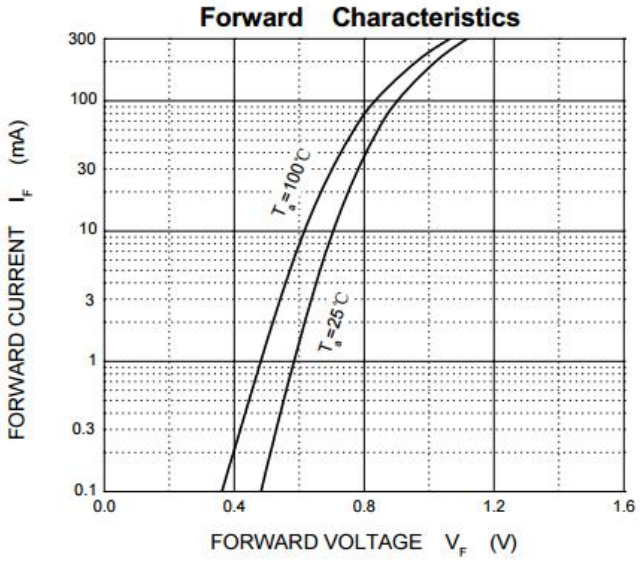
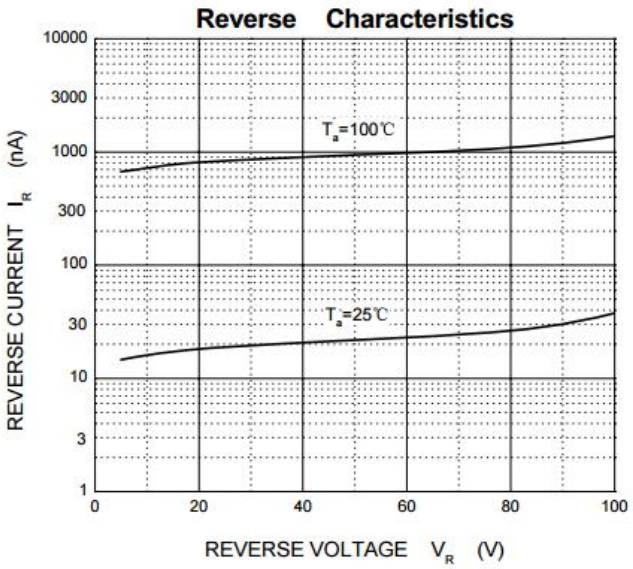
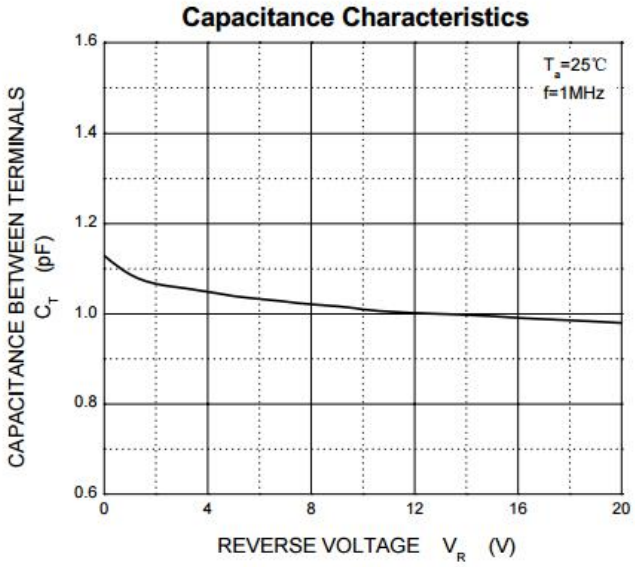
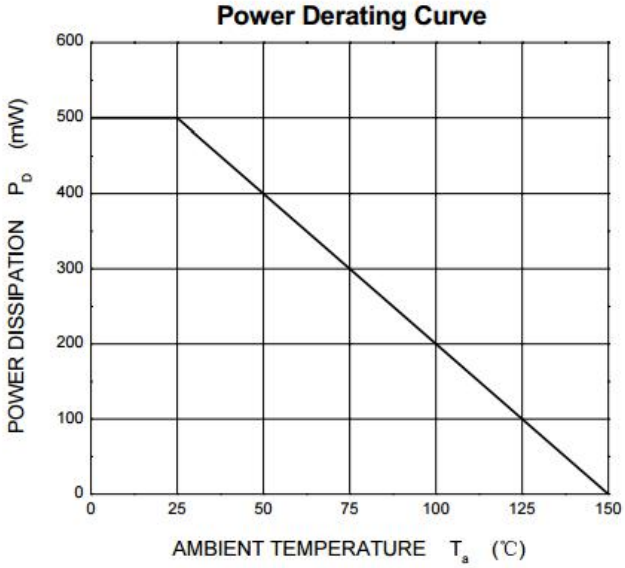
Typical Characteristics









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