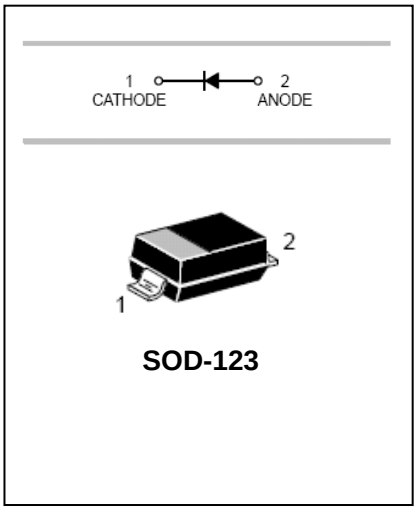
FEATURES

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

Lead-free



APPLICATIONS

- Surface mount fast switching diode

ORDERING INFORMATION

Type No.	Marking	Package Code
1N4448W	T5	SOD-123

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Reverse Voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Average Rectified Output Current	I_o	250	mA
Non-Repetitive Peak Forward Surge Current @t=1.0 μs @t=1.0 s	I_{FSM}	4.0 2.0	A
Power Dissipation	P_d	400	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	315	℃/W
Operating and Storage Temperature Rage	T_j,T_{STG}	-65 to +150	℃

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	75	-	V	I_R=10μA
Forward Voltage	V_{F1} V_{F2} V_{F3} V_{F4}	0.62 - - -	0.72 0.855 1.0 1.25	V	I_F=5mA I_F=10mA I_F=100mA I_F=150mA
Reverse Current	I_{RM}	-	2.5 25 30 25	μA μA μA nA	V_R=75V V_R=75V,T_j=150℃ V_R=25V,T_j=150℃ V_R=20V
Capacitance between terminals	C_T	-	4.0	pF	V_R=0,f=1.0MHz
Reverse Recovery Time	t_{rr}	-	4.0	ns	I_F=I_R=10mA, I_{rr}=0.1×I_R,R_L=100Ω

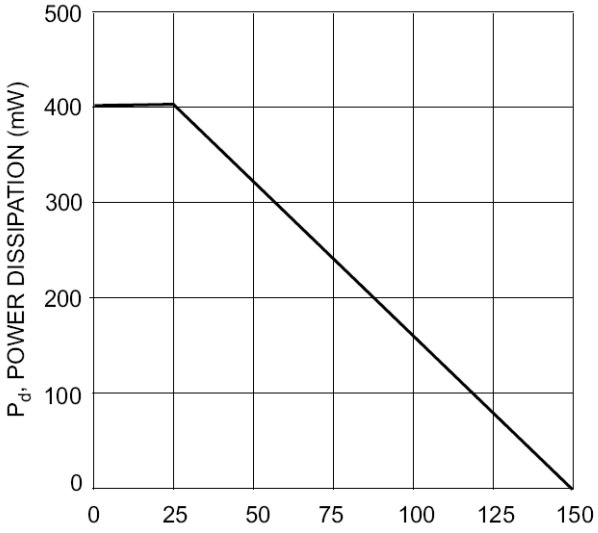


Fig. 1 Power Derating Curve

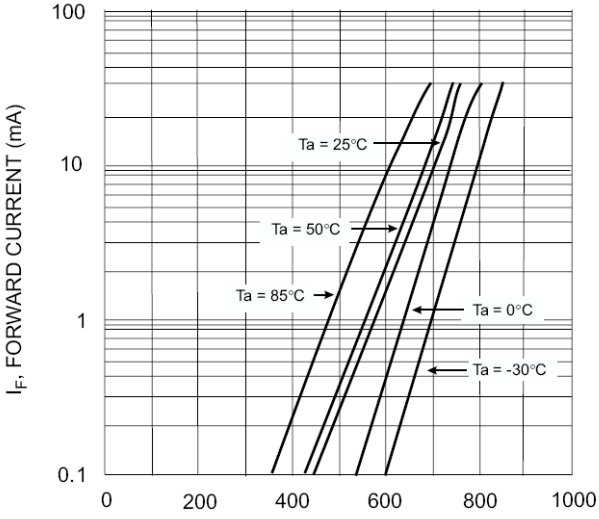


Fig. 2 Typical Forward Characteristics

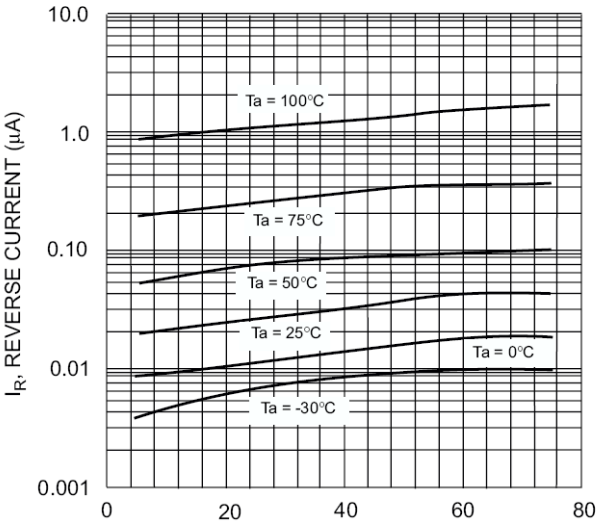


Fig. 3 Typical Reverse Characteristics

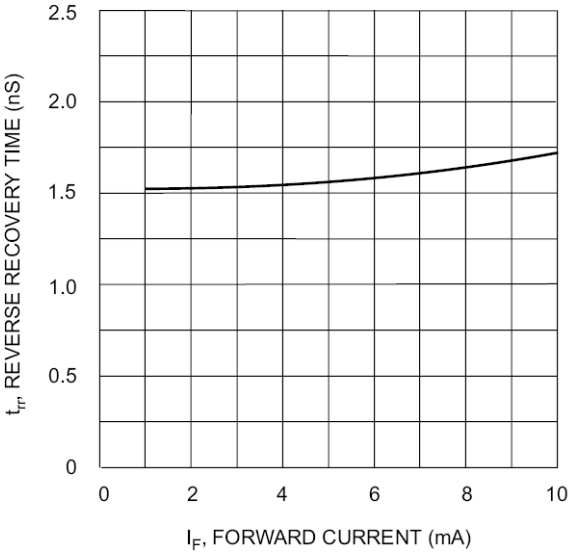


Fig. 4 Reverse Recovery Time vs. Forward Current

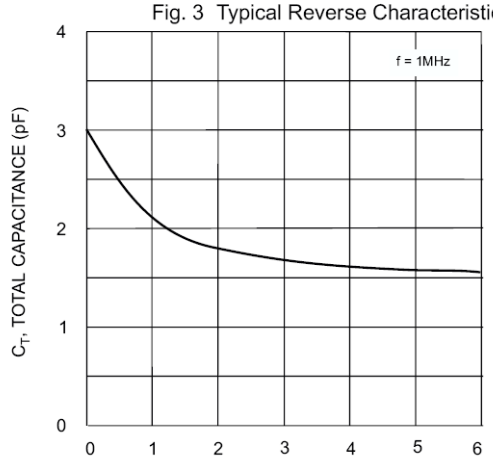
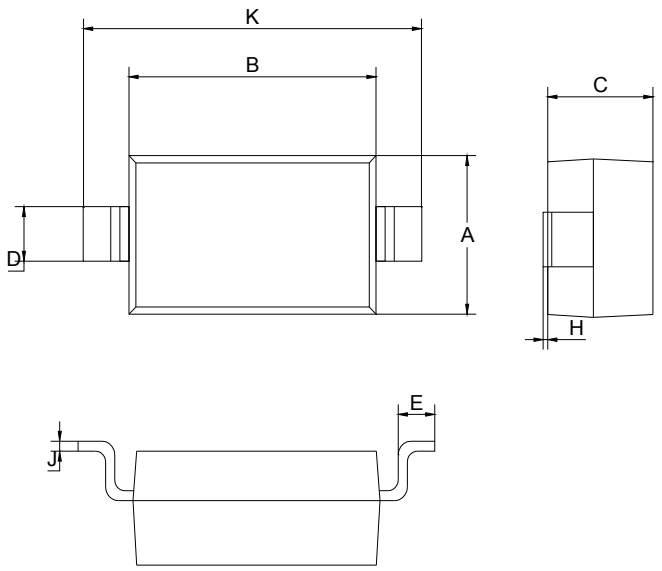


Fig. 5 Total Capacitance vs. Reverse Voltage

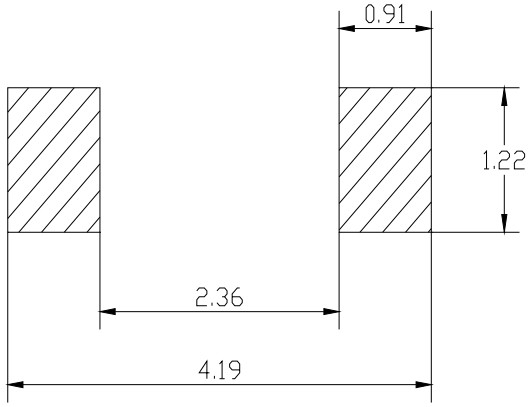
PACKAGE OUTLINE

Plastic surface mounted package SOD-123



SOD-123		
Dim	Min	Max
A	1.4	1.8
B	2.55	2.85
C	1.15 Typical	
D	0.55 Typical	
E	0.3	0.4
H	0.02	0.10
J	0.1 Typical	
K	3.55	3.85
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit：mm

PACKAGE INFORMATION

Device	Package	Shipping
1N4448W	SOD-123	3000/Tape&Reel