

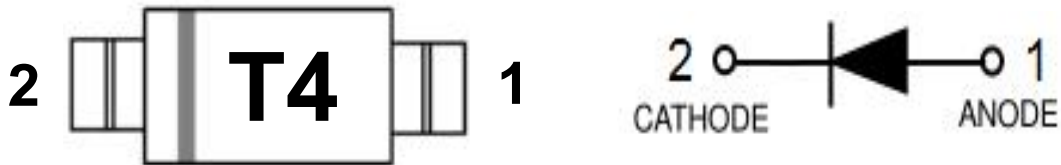


# 1N4148W SWITCHING DIODE

## 主要特征/Features

- ◇ Surface Mount SOD-123 Package ;
- ◇ Fast Switching Speed and High Conductance;
- ◇ For General Purpose Switching Applications;
- ◇ RoHS compliant / Green EMC;

## 印字/MARKING 等效电路/Equivalent Circuit



## 极限参数/Absolute Maximum Ratings(TA=25°C unless otherwise noted)

参数/Parameter	符号/ Symbol	数值/Value	单位/Unit
Non-Repetitive Peak reverse voltage	$V_{RM}$	100	V
Peak Repetitive Peak reverse voltage	$V_{RRM}$	100	V
Working Peak Reverse voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	71	V
Forward Continuous Current	$I_{FM}$	300	mA
Average Rectified Output Current	$I_O$	150	mA
Peak forward surge current @=1.0μs	$I_{FSM}$	2.0	A
@=1.0s		1.0	
Power Dissipation	$P_D$	0.5	W
Junction Temperature	$T_j$	150	°C
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	250	°C/W
Storage Temperature	$T_{stg}$	-55 ~ 150	°C

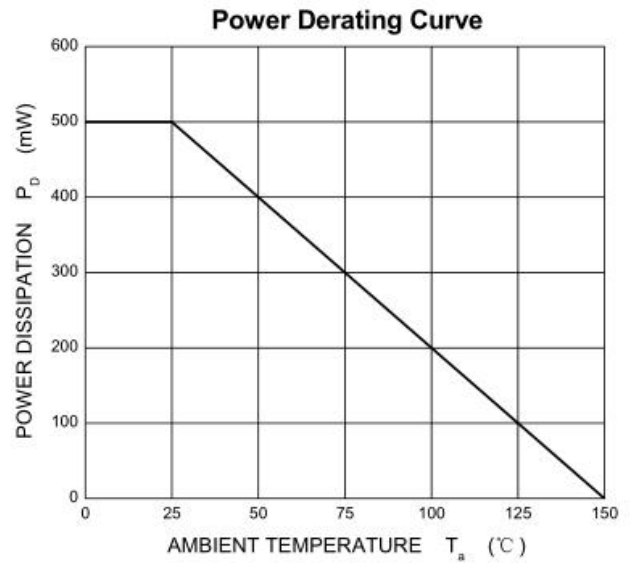
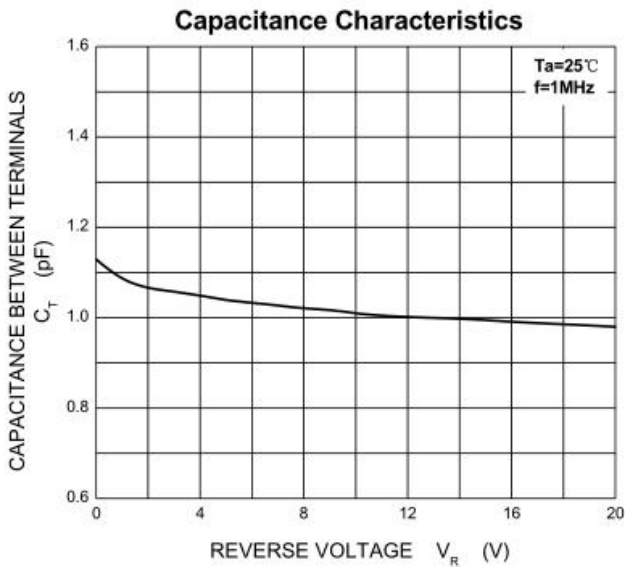
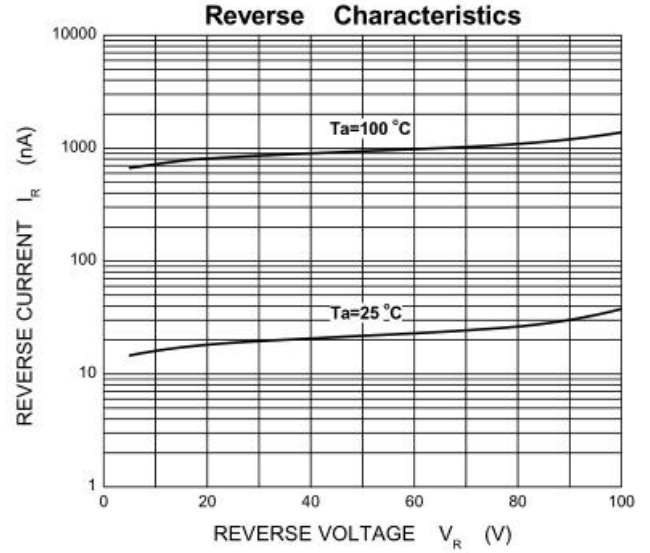
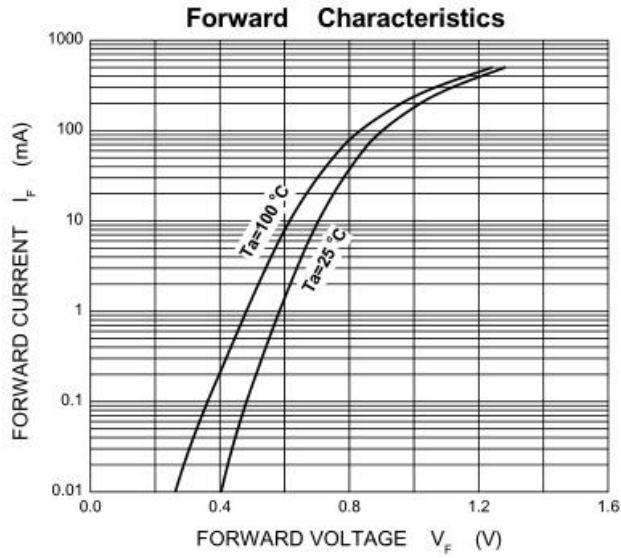


## 电性能参数/Electrical Characteristics (TA=25°C unless otherwise noted )

参数 Parameter	符号 Symbol	测试条件 Test conditions	最小值 Min	典型值 TYP	最大值 Max	单位 Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=100\mu A$	100			V
Forward voltage	$V_{F1}$	$I_F=1mA$			0.715	V
	$V_{F2}$	$I_F=10mA$			0.855	V
	$V_{F3}$	$I_F=50mA$			1	V
	$V_{F4}$	$I_F=150mA$			1.25	V
Reverse voltage leakage current	$I_{R1}$	$V_R=75V$			1	$\mu A$
	$I_{R2}$	$V_R=20V$			25	nA
Capacitance between terminals	$C_T$	$V_R=0V, f=1MHz$			2	pF
Reverse recovery time	trr	$I_F=I_R=10mA$ $I_{rr}=0.1\times I_R$ $R_L=100\Omega$			4	nS

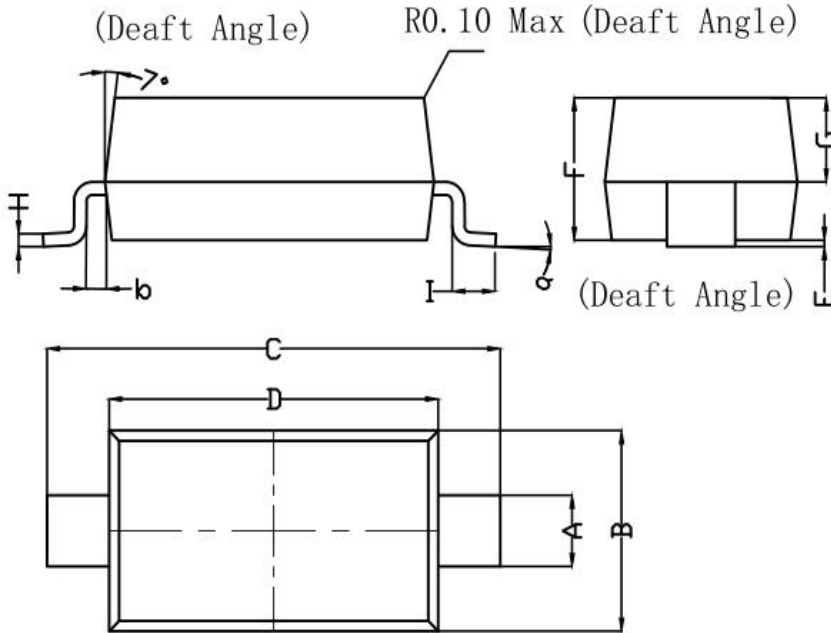


典型特性曲线图/Typical Characteristics





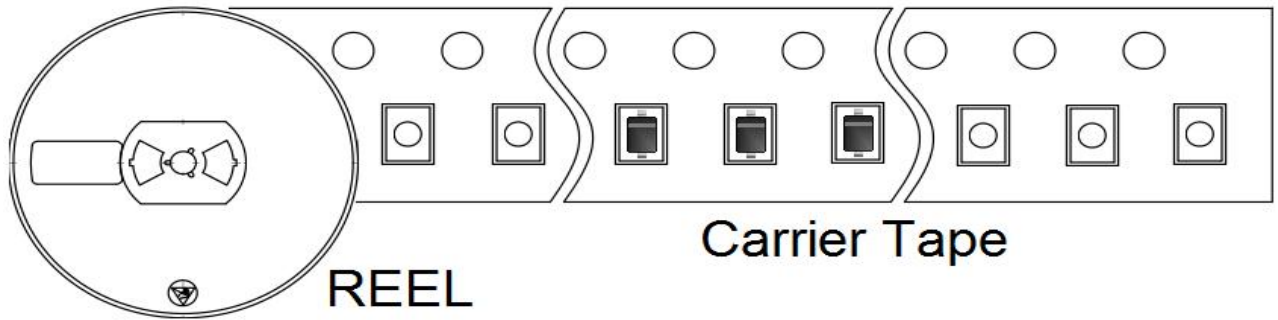
成品外观尺寸/SOD-123 Package Information



Symbol	Dim in mm		
	Min	Nom	Max
A	0.520	0.550	0.570
B	1.400	1.550	1.700
C	3.350	3.650	3.850
D	2.550	2.650	2.850
E	0.000	0.050	0.100
F	1.050	1.100	1.150
G	0.620	0.650	0.670
H	0.100	0.110	0.120
I	0.250	0.350	0.450
a	0°	-	6°
b	0.4°	-	0.8°

Mold Surface roughness <4um

出货规范/Shipping Specifications



×15



×4



Reel	Reel Size	Box	Box Size(mm)	Carton	Carton size(mm)
3000 Pcs	7 inch	45 KPcs	185×185×188	180 KPcs	400×400×210