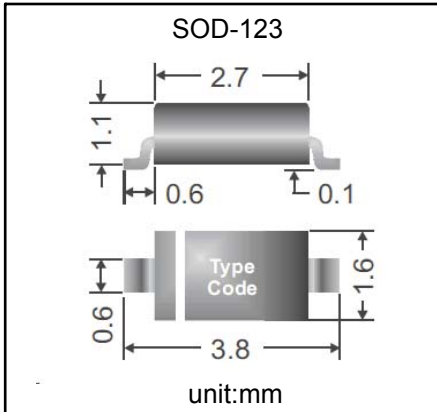


## 开关二极管

## Switching Diodes



## 特征 Features

- 反向漏电流小。Low reverse leakage
- 开关速度快。Fast switching speed
- 最大功率耗散500mW。Maximum power dissipation 500mW
- 高稳定性和可靠性。High stability and high reliability
- 引线 and 管体皆符合RoHS标准。  
Lead and body according with RoHS standard

## 机械数据 Mechanical Data

封装: SOD-123塑料封装 Case: SOD-123

极性: 色环端为负极 Polarity: Color band denotes cathode end

安装位置: 任意 Mounting Position: Any

极限值和温度特性 TA = 25℃ 除非另有规定。

Maximum Ratings &amp; Thermal Characteristics Ratings at 25℃ ambient temperature unless otherwise specified.

	符号 Symbols	1N4148W	单位 Unit
不重复峰值反向电压 Non-repetitive Peak Reverse Voltage	$V_{RM}$	100	V
反向峰值电压 peak repetitive Reverse Voltage	$V_{RRM}$	75	V
最大正向平均电流 Forward Continuous Current	$I_{FM}$	300	mA
平均整流输出电流 Average Rectified Output Current	$I_o$	150	mA
正向（不重复）浪涌电流 Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	2.0	A
功率消耗 Power Dissipation	$P_d$	500	mW
典型热阻 Type Thermal Resistance	$R_{\theta JA}$	300	℃/W
工作结温和存储温度 Operating junction and storage temperature range	$T_j, T_{STG}$	-55 --- +150	℃

电特性 TA = 25℃ 除非另有规定。

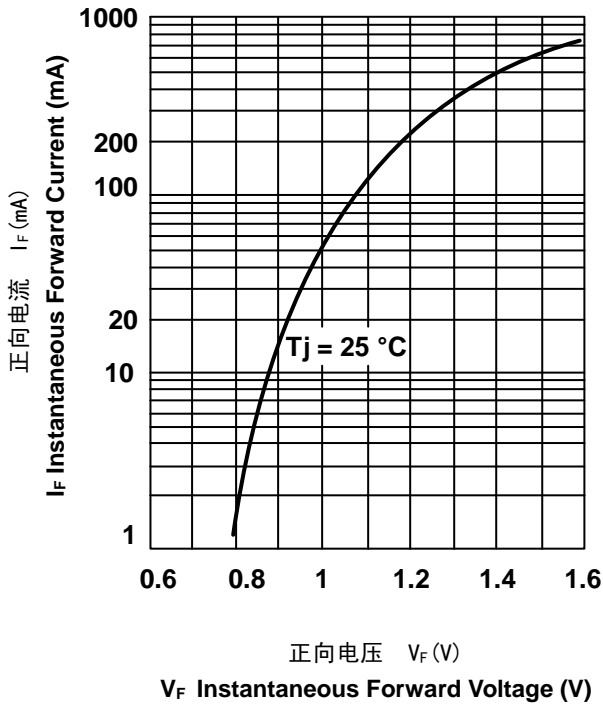
Electrical Characteristics Ratings at 25℃ ambient temperature unless otherwise specified.

	符号 Symbols	最小值 MIN.	最大值 MAX.	单位 Unit	测试条件 Test Condition
正向电压 Forward voltage	$V_{FM}$	---	1.0	V	$I_F = 10mA$
反向电流 Reverse current	$I_{RM}$	---	5.0 50 30 25	$\mu A$ $\mu A$ $\mu A$ nA	$V_R = 75V$ $V_R = 70V, T_j = 150^\circ C$ $V_R = 20V, T_j = 150^\circ C$ $V_R = 20V$
结电容 Junction capacitance	$C_j$	---	4.0	pF	$V_R = 0, f = 1.0MHz$
反向恢复时间 Reverse Recovery Time	$t_{rr}$	---	4.0	nS	$I_F = 10mA$ — $I_R = 1.0mA$ $V_R = 6.0V, R_L = 100\Omega$

特性曲线 Characteristic Curves

正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



正向电流降额曲线

FORWARD CURRENT DERATING CURVE

