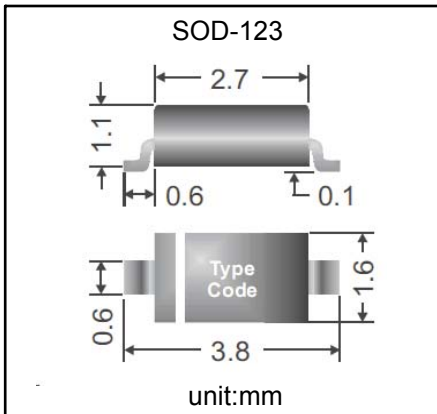


开关二极管

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 $T_A = 25^\circ\text{C}$ 除非另有规定。Maximum Ratings & Thermal Characteristics Ratings at 25°C 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	$^\circ\text{C}/\text{W}$
工作结温和存储温度 Operating junction and storage temperature range	T_j, T_{STG}	-55 --- +150	$^\circ\text{C}$

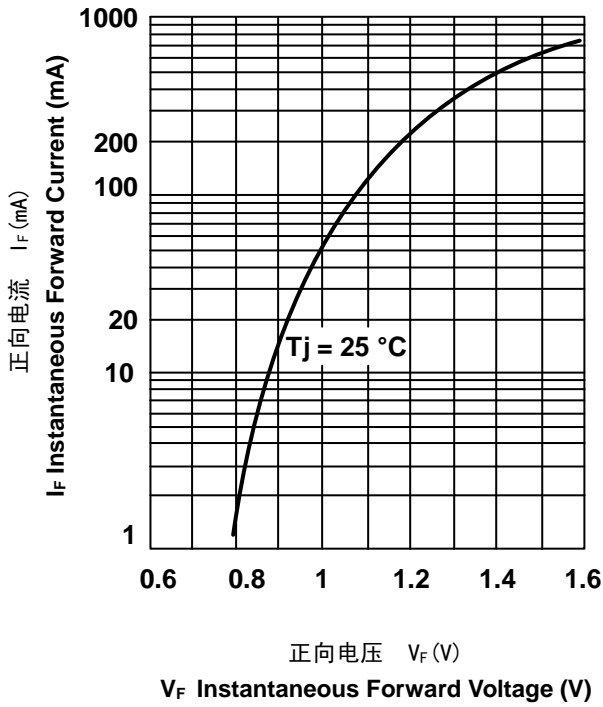
电特性 $T_A = 25^\circ\text{C}$ 除非另有规定。Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

	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	$I_F = 10\text{mA}$
反向电流 Reverse current	I_{RM}	---	5.0 50 30 25	μA μA μA nA	$V_R = 75\text{V}$ $V_R = 70\text{V}, T_j = 150^\circ\text{C}$ $V_R = 20\text{V}, T_j = 150^\circ\text{C}$ $V_R = 20\text{V}$
结电容 Junction capacitance	C_j	---	4.0	pF	$V_R = 0, f = 1.0\text{MHz}$
反向恢复时间 Reverse Recovery Time	t_{rr}	---	4.0	nS	$I_F = 10\text{mA} \rightarrow I_R = 1.0\text{mA}$ $V_R = 6.0\text{V}, R_L = 100\Omega$

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

