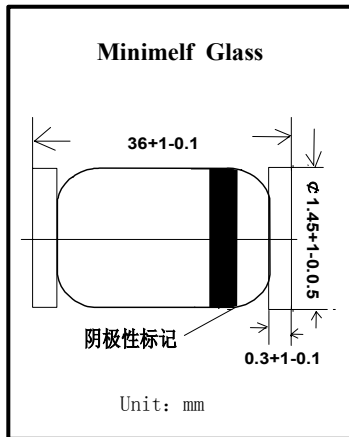


快速开关二极管 Fast Switching Diodes



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

机械数据 Mechanical Data

封装: 迷你 玻璃封装 Case: Glass Case Minimelf

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

安装位置: 任意 Mounting Position: Any

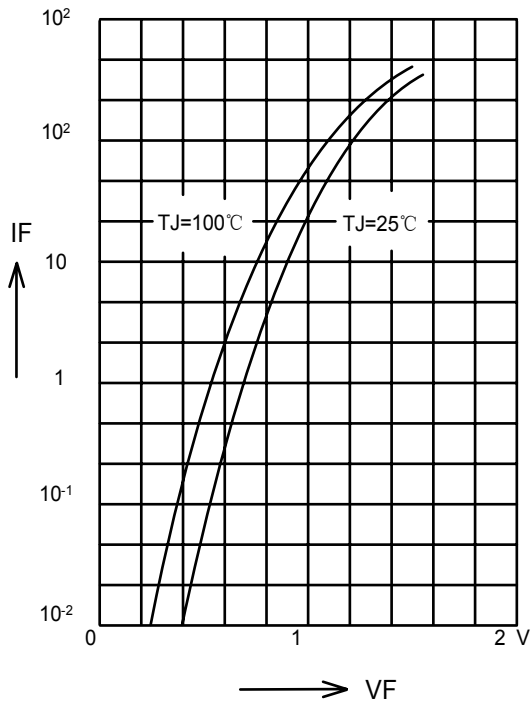
极限值和温度特性 $T_A = 25^\circ\text{C}$ 除非另有规定。Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| | 符号 Symbols | LL4148 | 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 $T_a=25^\circ\text{C}$ $f=50\text{Hz}$ Average Rectified Output Current | I_o | 150 | mA |
| 正向(不重复)浪涌电流 $T_J=25^\circ\text{C}$ Non-Repetitive Peak Forward Surge Current | I_{FSM} | 500 | mA |
| 功率消耗 Power Dissipation | P_d | 500 | mW |
| 典型热阻 Type Thermal Resistance | $R_{\theta JA}$ | 0.35 | K/mW |
| 工作结温和存储温度 Operating junction and storage temperature range | T_j, T_{STG} | -65 --- +175 | $^\circ\text{C}$ |

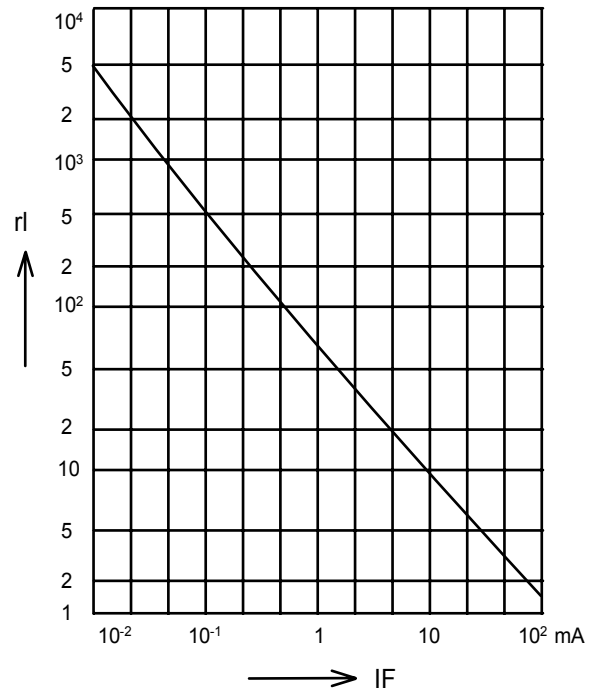
电特性 $T_A = 25^\circ\text{C}$ 除非另有规定。Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| | 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} | --- | 25 5 50 | nA uA uA | $V_R = 20\text{V}$ $V_R = 75\text{V}$ $V_R = 20\text{V}, T_j = 150^\circ\text{C}$ |
| 结电容 Junction capacitance | C_j | --- | | pF | $V_R = 0, f = 1.0\text{MHz}$ |
| 反向恢复时间 Reverse Recovery Time | t_{rr} | --- | 4.0 | nS | $I_F = 10\text{mA}$ — $I_R = 1.0\text{mA}$ $V_R = 6.0\text{V}, R_L = 100\Omega$ |

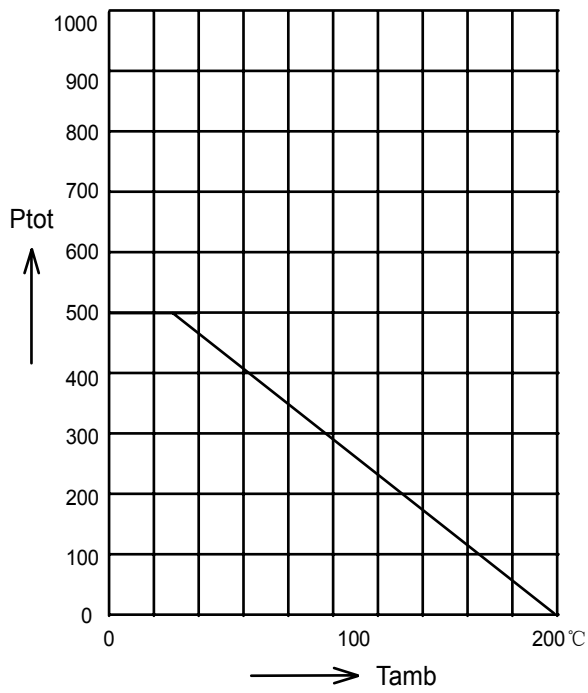
正向特性曲线图



动态正向电阻VS. 正向电流



功率耗散降额特性曲线



结电容VS. 反向电压

