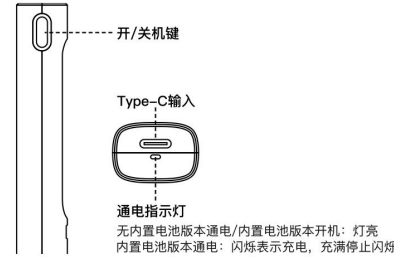
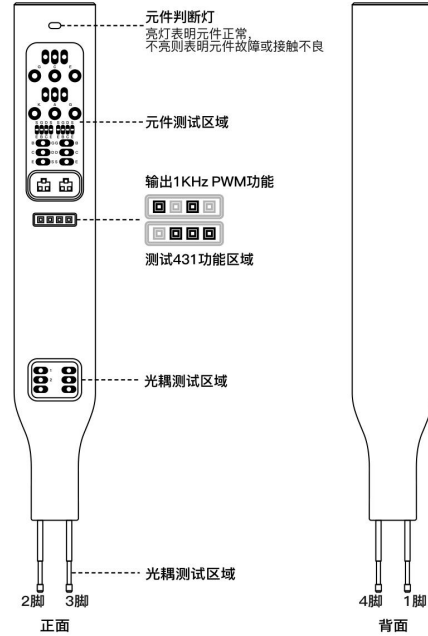




TO2系列产品 使用说明书

一、产品基本介绍

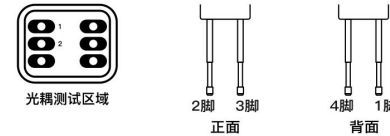
产品面板



二、使用步骤

(1) 光耦测试

接电后, 将需测试的光耦插入对应区域接口或者使用探针压住光耦, 此时“元件判断灯”亮灯, 表明光耦是好的, 不亮则为故障或接触不良。



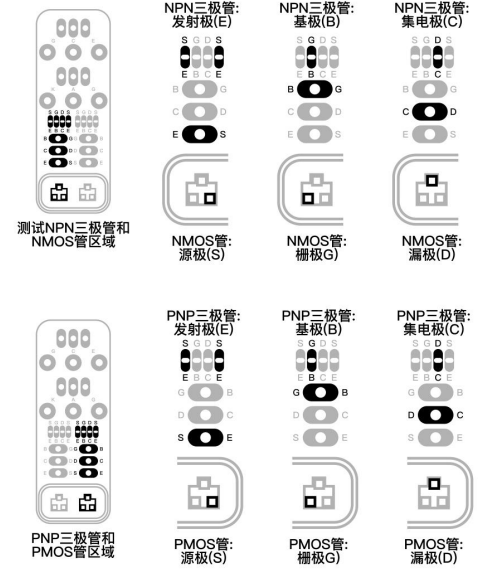
(2) TL431测试

接电后, 将需测试的TL431插入对应区域接口, 此时“元件判断灯”亮灯, 表明TL431是好的, 不亮则为故障或接触不良。



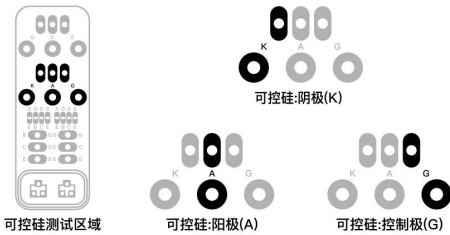
(3) 三极管和MOS管测试

接电后, 将需测试的三极管或者MOS管插入对应区域接口, 此时“元件判断灯”亮灯, 表明三极管或者MOS管是好的, 不亮则为故障或接触不良。



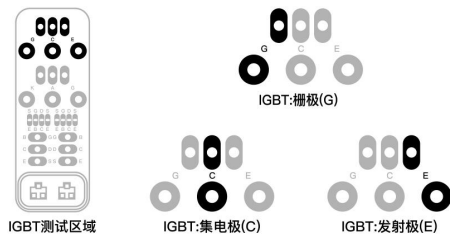
(4) 可控硅测试

接电后, 将需测试的可控硅插入对应区域接口, 此时“元件判断灯”亮灯, 表明可控硅是好的, 不亮则为故障或接触不良。



(5) IGBT测试

接电后, 将需测试的IGBT插入对应区域接口, 此时“元件判断灯”亮灯, 表明IGBT是好的, 不亮则为故障或接触不良。



(6) 1KHz PWM测试

在1KHz PWM测试接口引线接到需测试的电路板上, 给需测试的电路板提供信号。



注: 1KHz PWM的主要应用

- 开关电源: 方波信号可以用于控制开关电源的开关状态, 从而实现电压和电流的调节。
- 音频信号: 方波信号可以用于产生音频信号, 如蜂鸣器、扬声器等。
- 数字电路: 方波信号可以作为数字电路的时钟信号, 控制电路的工作时序。

三、特别说明

- 产品接电即自动开机。无内置电池版本, 需保持插电使用。
- 内置电池版本, 无接电状态下“通电指示灯”闪烁表示电量低, 请及时充电。
- 请做好探针防护, 不要磕碰、挤压, 避免探针功能失效。
- 请勿测试带电的电路, 以免损坏本产品。

四、注意事项

- 请勿自行改造、拆解、修理本产品。
- 严禁使产品接触任何液体, 请勿将产品浸入水中或将其弄湿。切勿在雨中或者潮湿的环境中使用机器。
- 产品建议在环境温度0℃-50℃之间使用。
- 禁止将产品放在靠近热源的地方, 比如阳光直射处、火源或加热炉旁。
- 请勿将产品存放在潮湿的环境, 存放环境温度需保持在10℃至40℃之间。

五、产品参数

基本规格

产品名称	元器件测试工具
产品型号	TO2系列
输入电压	5V
输入电流	0.2A (MAX)

六、售后服务与支持

保修条例 (当产品需进行保修时, 请出示本保修卡)

自您签收之日起7日内, 本产品出现非人为性能故障的情况: 经由售后检测确定, 可免费享受退换货。

非保修条例

- 未经授权维修、拆装、改动等, 或撕毁涂改标签及防伪标记。
- 因不可抗力/人为造成的损坏。
- 因未按照说明书的操作步骤使用导致的性能故障。

售后注意事项

- 退换货产品不得影响二次销售, 需原样发回产品及赠品。如质量问题导致退换, 请先垫付邮费, 待我们收到货返还。
- 非质量原因导致退货, 若赠品已使用过, 需扣除赠品费用。
- 不在保修范围内的产品, 我司可提供有偿维修服务。

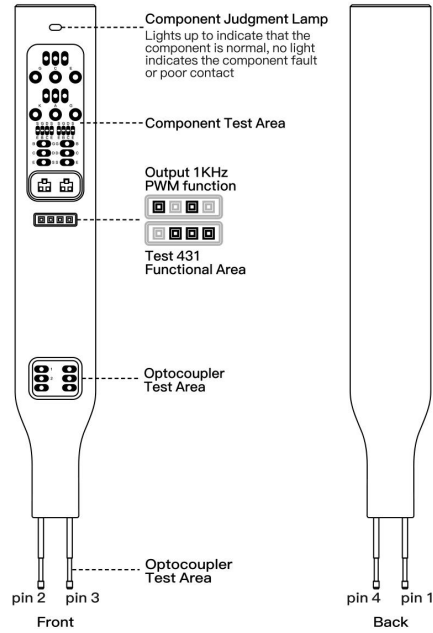
用户信息

姓 名: _____ 联系电话: _____
订单编号: _____ 购买日期: _____
地 址: _____



Product Introduction

Product Panel



(F) 1KHz PWM Test

The 1KHz PWM test interface leads are connected to the board to be tested to provide signals to the board.



Output 1KHz PWM function



Pulse Output



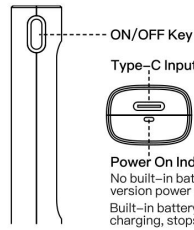
Power Supply: GND

Notes: Main applications of 1KHz PWM

1. Switching Power Supply: Square wave signals can be used to control the switching state of switching power supply, thus realizing the regulation of voltage and current.
2. Audio signal: square wave signals can be used to generate audio signals, such as buzzers, speakers, etc.
3. Digital circuit: Square wave signals can be used as clock signals for digital circuits to control the operating timing of the circuits.

Specification

1. The product turns on automatically when it is powered on. For the version without built-in battery, please keep it plugged in.
2. For the built-in battery version, the "power-on indicator" blinks when the product is not connected to the power supply, indicating low power, so please charge the battery in time.
3. Please do a good job of probe protection, do not bump or squeeze to avoid probe function failure.
4. Please do not test the charged circuit to avoid damage to the product.



Steps for use

(A) Optocoupler test

After connecting the power, insert the optocoupler to be tested into the corresponding regional interface or use the probe to press the optocoupler, at this time, the "Component Judgment Lamp" lights up, indicating that the optocoupler is good, and does not light up is faulty or poor contact.



Optocoupler Test Area



pin 2 pin 3 Front



pin 4 pin 1 Back

(B) TL431 test

After connecting the power, insert the TL431 to be tested into the corresponding regional interface, at this time, the "Component Judgment Lamp" lights up, indicating that the TL431 is good, and does not light up is faulty or poor contact.



Test 431 Functional Area



431: Reference (R)



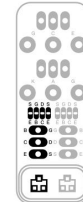
431: Anode (A)



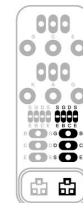
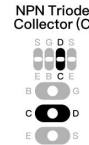
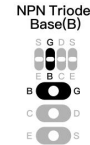
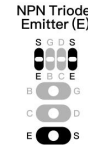
431: Cathode (K)

(C) Triode and MOS tube test

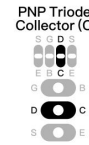
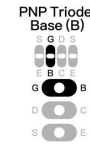
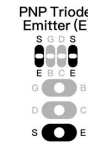
After connecting the power, insert the triode or MOS tube to be tested into the corresponding regional interface, at this time, the "Component Judgment Lamp" lights up, indicating that the triode or MOS tube is good, and does not light up is faulty or poor contact.



Testing NPN Triode and NMOS Tube Area

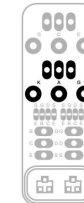


PNP Triode and PMOS Tube Area

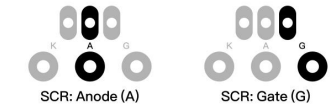
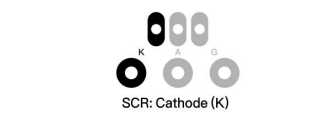


(D) SCR test

After connecting the power, insert the SCR to be tested into the corresponding regional interface, at this time, the "Component Judgment Lamp" lights up, indicating that the SCR is good, and does not light up is faulty or poor contact.



Thyristor Test Area



(E) IGBT test

After connecting the power, insert the IGBT to be tested into the corresponding regional interface, at this time, the "Component Judgment Lamp" lights up, indicating that the IGBT is good, and does not light up is faulty or poor contact.



IGBT Test Area

