

# SPECIFICATION

# 产品规格书

REFOND P/N 产品型号  
RF-MTCGW7Z14248-A0

R&D 研发

Mass Product 量产供货

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## 1. Description 产品介绍

### 1.1 General Description 产品描述



Notes 备注: The product is composed of SMD5050RGBLED (60PCS / m) RGB led and FPC board.

产品由 SMD5050RGBLED(60PCS/m)和 FPC 软板组成。

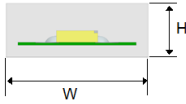
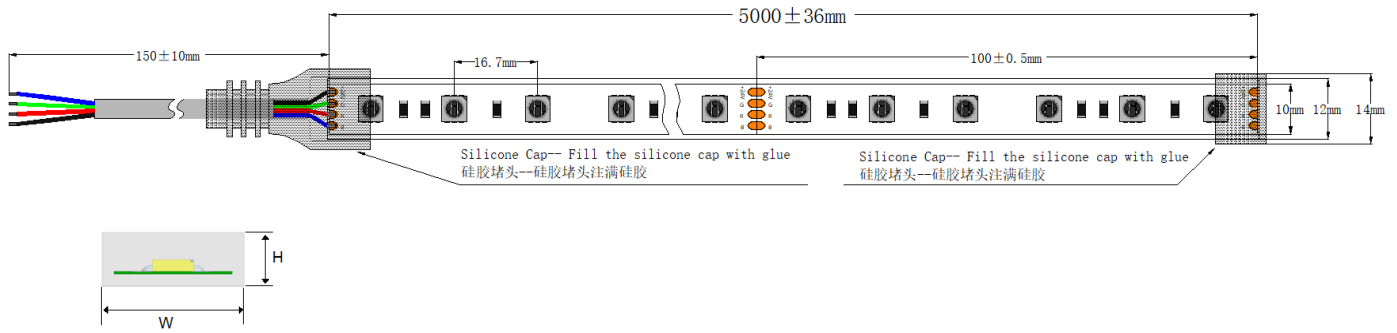
### 1.2 Features 产品特征

- ▶ The light source of the LED strip is 5050, which has high luminous efficiency, less heat, no mercury, and environmentally friendly performance;  
LED 灯带的光源是 5050, 具有高发光效率, 较少的热量, 无汞, 环保的性能;
- ▶ Low voltage DC24V constant voltage driving to ensure safe and reliable running;  
低压 DC24V 恒压驱动, 确保运行安全可靠;
- ▶ RoHS, CE compliant.  
符合 CE, RoHS.

### 1.3 Application 产品应用

- ▶ Home decoration (staircase lighting, hall aisle lighting, lighting decoration, edge hook decoration)  
家居装饰 (阶梯照明、大厅走道照明、灯光装饰、边缘勾边装饰)
- ▶ Event venue decoration, exhibition venue decoration, exhibition hall decoration, showcases, window, props and other decorative lighting applications  
活动会场布景、展览会场装饰、展馆装饰、展柜、橱窗、道具等应用装饰照明
- ▶ Linear light source and other applications  
线型灯具光源等应用
- ▶ General use.其他应用

## 1.4 Size chart 产品尺寸图



IP68

尺寸size : 12\*4.5mm

	Dimension 尺寸	Specification 规格	Tolerance 公差
L	Strip Length 灯条长度	5000	±36
W	Strip Width 灯条宽度	12	±0.2
H1	PCB Thickness PCB 厚度	0.25	±0.15
H2	Height of Strip 灯条高度	4.5	±0.1

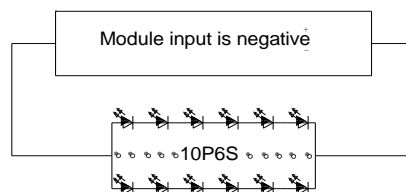
Notes 备注: The product has a single strip of 500mm, with a maximum of 10 cascades (5m). The 6PCS lamp is a set of cuttable, single-ended outlets, which can be spliced at will.

产品单条 500mm, 最大级联 10 条 (5m), 6PCS 灯为一组可剪, 单端出线, 可任意拼接。

## 1.5 Product Parameters 产品参数

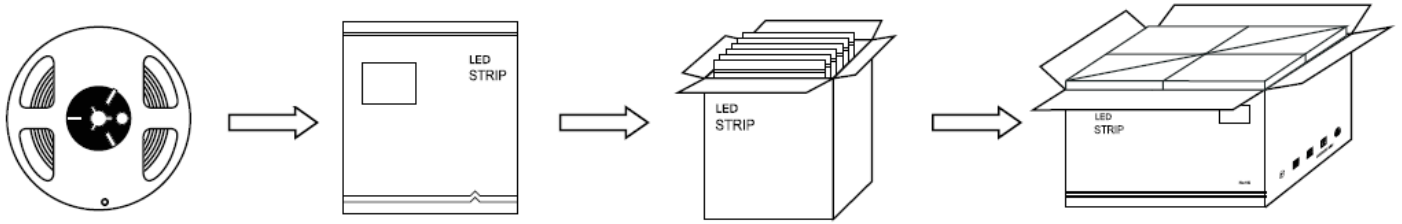
Refond PN 瑞丰产品料号	灯条参数Strip Characteristics							
	色温/波长 (K/nm)	发光角度 (°)	显指 Ra	光通量 (lm/m)	光效 (lm/W)	电压 Voltage(V)	电流 Current (mA)	功率 Power(W)
	Typ	Typ	Typ	Typ	Typ	Typ	Typ	Typ
RF-MTCGW7Z14248-A0 IP68	R:620nm G:520nm B:470nm	120	-	410	41	24	600	14.4

## 1.6 LED Strip Schematic And Interface Definition 灯带电性规格



## 2. Packaging 产品包装

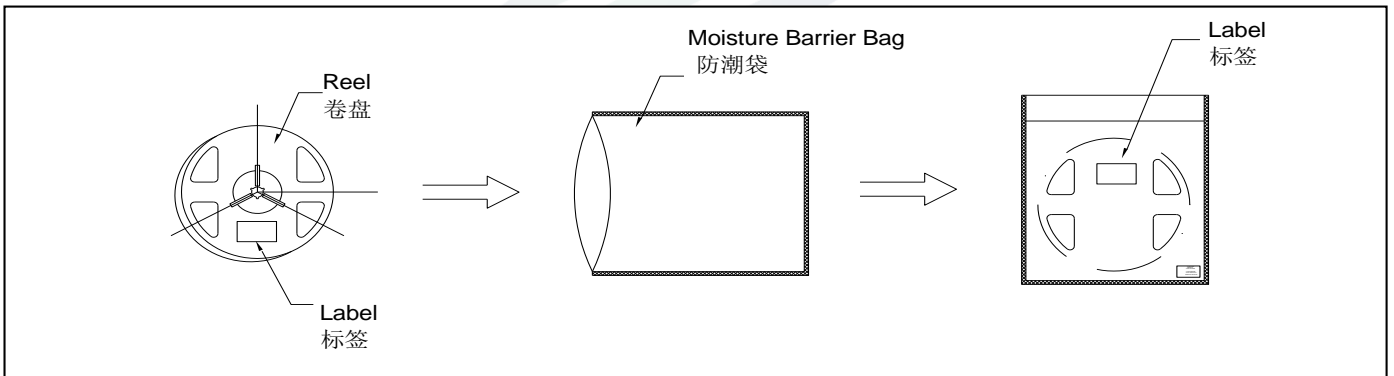
### 2.1 Packaging Specification 包装规格



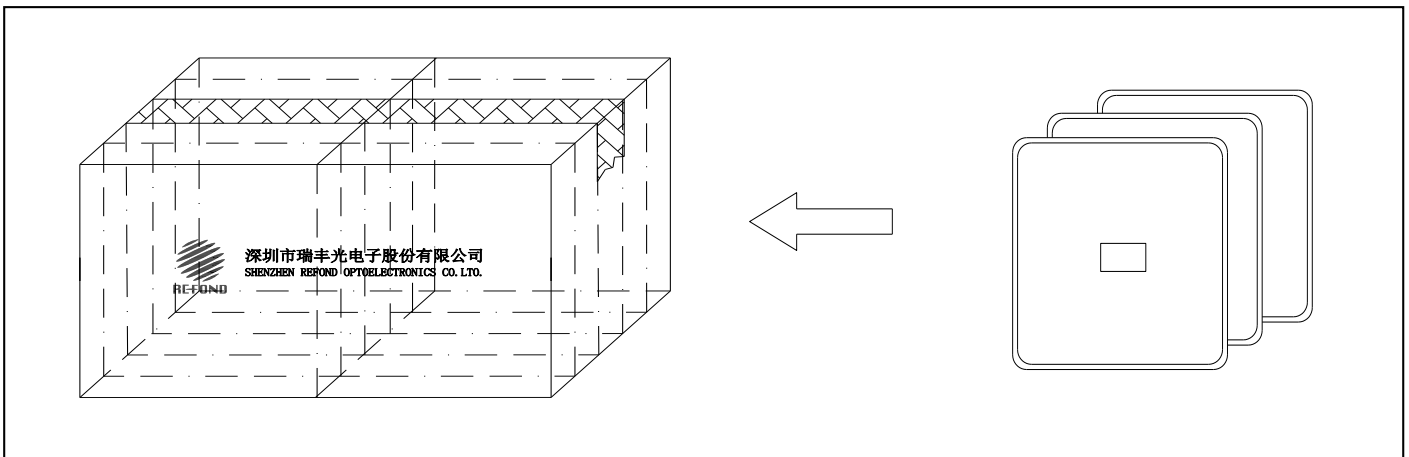
### 2.2 Label Form Specification 标签规格

<b>Refond LED Flexible Strips</b>	
P/N: RF-MTCGW7Z14248-A0	
Item code:	
LED TYPE: 5050	Color: RGB
Voltage: 24V	Power: 14W/M
IP Rate: IP68	Length: 5M/Reel
Date: 2024-xx-xx	

### 2.3 Moisture Resistant Packing 防潮包装



### 2.4 Cardboard Box 包装纸箱



### 3. Strip Reliability Test 灯条可靠性实验

Tab 3-1 Strip Reliability Test 灯条可靠性实验

Test Item/ 测试项目	Test Conditions/ 测试条件	Test Time/ 测试时长	Number of Test/ 测试数量	Judgement Criteria/判 定标准
Operating Life at Room Temperature/ 常温测试	$T_A=25^{\circ}\text{C}$ $V_F=24\text{V}$ $T_J<115^{\circ}\text{C}$	1000Hrs	0/6	1. $\Delta\Phi<30\%$ , $V_f<110\%$ , $\text{CIE}\Delta x/\Delta y<0.015$ 2.No catastrophic failure
Operating Life at High Temperature/ 高温测试	$T_A=80^{\circ}\text{C}$ $V_F=24\text{V}$ $T_J<115^{\circ}\text{C}$	1000Hrs	0/6	
Operating Life at High Temperature and Humidity/ 高温高湿测试	$70^{\circ}\text{C}$ $R_H=90\%$ $V_F=24\text{V}$ $T_J<115^{\circ}\text{C}$	1000Hrs	0/6	
Thermal Shock/ 冷热冲击	$-40^{\circ}\text{C}$ 15min $\uparrow\downarrow 10\text{S}$ $80^{\circ}\text{C}$ 15min	300 cycle	0/6	No DeadLED

Notes 备注:

The above reliability test is based on the results of Ruifeng's existing experimental platform LED light bar verified under good heat dissipation conditions. 以上可靠性测试是基于瑞丰现有实验平台 LED 灯条在良好散热条件验证下的结果。



## 4. Handling Precautions 产品使用注意事项

### 4.1 Product use and installation instructions 产品使用安装说明

- ▶ Clean the installation surface 将安装表面进行清理干净.
- ▶ Take out the flexible strip from the reel 将柔性灯带从卷盘上取出.
- ▶ Place the products close to the mounting surface in sequence 将产品依次序紧贴于安装表面.
- ▶ After mounting the flexible strip on the surface, connect the power supply lead of this product to the driver output terminal and do proper insulation treatment, paying attention to the polarity of the lead 将柔性灯带安装表面后，将本产品供电导线连接到驱动器输出端中，并做适当绝缘处理，注意导线极性。
- ▶ After the product cable is installed, connect the driver to the test power to supply power to the driver 产品连接线安装完成后，将驱动器连接到市电当中，对驱动器进行供电.

### 4.2 Handling Precautions 产品使用注意事项

The power supply voltage should be the same as that indicated on the LED flexible strip, and appropriate safety devices should be installed.

- ▶ 电源电压应与 LED 软灯带所标示一致，并安装适当保险装置.

Observe if the positive and negative poles of the power supply before installation, and connect them properly, otherwise the light strip will be damaged.

- ▶ 安装前观察好电源正负极后，正确连接，否则会损坏灯带.

Do not apply power to the light strip during the installation of the goods. To avoid short-circuit failure of the light strip caused by operating errors during operation, the power can only be connected under the condition of connection, installation and correctness.

- ▶ 请勿在安装货装配灯带过程中通电操作，避免作业过程中操作失误导致灯带短路失效，只有接驳、安装好且正确的情况下才能接通电源.

The flexible LED strip can only be cut at the silk-screened scissors mark on the light strip, and other places will damage the circuit of the light strip and cause some of the lamp beads to fail.

- ▶ LED 软灯带只能在灯带上丝印有剪刀标记处剪开，其他地方剪开会损坏灯带电路回路，导致部分灯珠不亮现象.

The interface must be firm and free from short-circuit risks. For outdoor installation, each interface must be sealed with neutral glass glue, or waterproof connectors should be used for splicing to ensure that water does not enter the interface.

- ▶ 接口必须牢固，无短路隐患，户外安装时，各接口必须用中性玻璃胶密封接口，或使用防水连接器进行拼接，保证接口处不进水.





Declare 申明

This specification is written both in English and in Chinese and the latter is formal.  
产品规格书以中英文方式书写，若有冲突以中文版本为准。