

**PRODUCT SPECIFICATION FOR APPROVAL**

**产品规格承认书**

**CUSTOMER NAME / 客户名称**      1606

**CUSTOMER ITEM / 产品名称** : 10W 远距离无线充电发射模组

**PRODUCT MODEL / 产品型号** :      WC806

**APP Date / 日期** :      2024-9-06

|                                    |
|------------------------------------|
| <b>APPROVAL SIGNATURE / 客户承认签章</b> |
|                                    |

Note: Please feedback confirmation in 5 days or it should be executed under this Spec.  
备注：本承认书请在客户收到 5 天内能确认返回，逾期视为生产时按此承认书的标准执行，不便之处请谅解！

**地址：** 中国安徽省阜阳市颍泉区利辛路与瑞祥路交叉口无人机产业园 A12 栋  
**ADD:** A12 Building, Unmanned Aerial Vehicle Industrial Park, Intersection of Lixin Road and Ruixiang Road, Yingquan District, Fuyang City, Anhui Province

**地址：** 中国广东省深圳市龙岗区龙城街道黄阁坑社区腾飞路 9 号龙岗创投大厦 1 号楼 4201  
**ADD:** No. 4201, Building 1, Longgang Venture Capital Building, Tengfei Road, Huanggekeng Community, Longcheng Street, Longgang District, Shenzhen City, Guangdong Province

| APPROVED<br>批准 | SALES BY<br>业务 | QUALITY ASSURE<br>品管 | ENGINEERING<br>工程 |
|----------------|----------------|----------------------|-------------------|
|                |                |                      |                   |

Product Specification

产品规格书

|                    |                  |
|--------------------|------------------|
| Product name/产品名称: | 10W远距离无线充电发射模组   |
| Model No/ 产品型号:    | WC806            |
| File number /文件编号: | WC806_TX_MB_V0.1 |
| Revision/版本号:      | A1.0             |
| Date/日期:           | 2024-9-06        |



|                   |                  |                   |
|-------------------|------------------|-------------------|
| APPROVED BY<br>批准 | CHECKED BY<br>审核 | DESIGNED BY<br>制作 |
|                   |                  | 林庆                |

## Reversion History / 更新记录

[illegible]

1. Scope/概述

- 1.1 The purpose of the document is to specify the functional requirement of a Remote wireless charging Medium Power Tx Module.  
文档的目的是指定一个远距离无线充中功率（10W）发射模块的功能要求.
- 1.2 The Wireless Power supply’s Tx Module should meet the ROHS requirement.  
无线供电的 TX 模块应符合 ROHS 要求.

2. Product Characteristic/产品特点

| <p>WC806 is a wireless charging and transmitting module that meets the requirements of ROHS. It adopts low-frequency magnetic resonance wireless charging technology, which greatly increases the charging distance and easily realizes the convenience brought by wireless; the longest charging distance can reach18mm. When installing, place the wireless charging transmitter below the desktop (the desktop cannot be made of metal or magnetic material); place the mobile phone with Qi wireless charging function in the center to perform wireless charging.</p> <p>WC806 是一款符合 ROHS 要求的无线充发射模块，采用低频磁共振无线充电技术,使得充电距离大幅提升，轻松实现无线带来的方便；最远充电距离可达 12mm。安装时将无线充电发射器置于桌面以下（桌面不可为金属材质或导磁材质）;将具备 Qi 无线充电功能的手机放置在正中心，即可进行无线充电。</p> |                         |               |                |                         |             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------|----------------|-------------------------|-------------|
| <p>Multiple LED indication scheme available for options :<br/>多种 LED 指示灯可供选择:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                         |               |                |                         |             |
| LED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Operational States/操作状态 |               |                |                         |             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Power On<br>芯片上电        | Standby<br>待机 | Charger<br>充电中 | Charge Complete<br>充电完成 | Fault<br>异常 |
| LED1: 蓝                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 亮一下                     | Off           | 亮              | Off                     | 闪烁          |
| LED2: /                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | /                       | /             | /              | /                       | /           |
| <p>* Standard no LED light,LED1&amp;LED2 for customer to choose, or design customer LED color.<br/>* 标准品无 LED 灯，LED1&amp;LED2 供客户选择，也可以设计客户 LED 灯颜色。</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |               |                |                         |             |

|                             |                                                      |
|-----------------------------|------------------------------------------------------|
| Input/输入                    | DC29V/0. 5A （max）                                    |
| Wireless output/无线输出        | 慢充 5V /1000MA (max) 快充 DC9V/1100mA (max)             |
| stand-by current/待机电流       | <100mA                                               |
| Wireless distance/无线距离      | 5mm~12mm （最佳建议充电距离 5~10mm，线圈到线圈距离，请勿将待充电设备置于 5mm 以下） |
| Temperature protection/温度保护 | 75±5° C                                              |
| Indication function/指示功能    | LED                                                  |
| compatibility/兼容性           | 兼容 QI 无线接收产品（手机设备）                                   |
| Overcurrent protection/过流保护 | 2A (保险丝)                                             |

### 3. Input Characteristics / 输入特性

#### 3.1. Input Voltage & Frequency / 输入电压&频率

| Item/项目            | Minimum/最小 | Normal/标准 | Maximum/最大 |
|--------------------|------------|-----------|------------|
| Input Voltage/输入电压 | 15Vdc      | 29Vdc     | 29.55Vdc   |

| TX 输入电压 | RX 模组类别 |        |        |            |             |
|---------|---------|--------|--------|------------|-------------|
|         | Qi-5W   | Qi-10W | Qi-15W | Apple 7.5W | Samsung 10W |
| 29.0Vdc | √       | √      | /      | /          | √           |

#### 3.2. Input Current/输入电流

0.50Amax. @29Vdc Full load

#### 3.3. Inrush Current (cold) /浪涌电流 (冷电流)

0.50Amax. @29Vdc Full load & Ambient temperature 25 °C

#### 3.4. Energy Consumption/损耗

At 15VDC or 29.55VDC, Energy Consumption  $\leq$  1.025W

### 4. Output Characteristics (Rx\_Module) /输出特性

#### 1. 4.1. Static Output Characteristics <Vo & R+N>/静态输出特性 (输出&纹波+噪音)

| Output | Rated Load/额定负载 |           | Output Range | R+N/纹波+噪音       | Remark |
|--------|-----------------|-----------|--------------|-----------------|--------|
| Power  | Min. Load       | Max. Load | 输出电压范围       |                 |        |
| 10W    | 0.10A           | 1.1A      | 9V $\pm$ 5%  | $\leq$ 600mVp-p | Rx     |
| 5W     | 0.10A           | 1A        | 5V $\pm$ 5%  | $\leq$ 600mVp-p |        |

Note: Ripple & Noise: Measurement is done by 20MHz bandwidth oscilloscope and the output end paralleled a 0.1uF ceramic capacitor and a 47uF electrolysis capacitor.

注意: 纹波与噪声: 量测时示波器选用 20MHz 带宽限制, 输出端要并联一颗 0.1uF 的陶瓷电容和一颗 47uF 的电解电容。

#### 4.2. Line & Load Regulation/线性&负载调整率

| Output | Load Condition/负载条件 |           | Line Regulation | Load Regulation |
|--------|---------------------|-----------|-----------------|-----------------|
| Power  | Min. Load           | Max. Load | 线性调整率           | 负载调整率           |
| 10W    | 0.10A               | 1.1A      | $\pm$ 5%        | $\pm$ 5%        |
| 5W     | 0.10A               | 1A        | $\pm$ 5%        | $\pm$ 5%        |

#### 4.3 Environment Requirement/环境要求

1. Operating Temperature and Relative Humidity/操作温度和相对湿度

0°C - 25°C 20%RH to 80%RH @altitude should be below 10000 feet.

7.2. Storage Temperature and Relative Humidity/储存温度和相对湿度

-20°C to +60°C 10%RH to 90%RH(non-condensing) @altitude should be below 30000 feet.

## 5. Photo of Product/产品照片



## 10.Module/模块

### 10.1. Precautions/ 注意事项

1.The normal vertical charging distance must be greater than 8mm.

正常垂直充电距离必须大于 5mm。

2.Metal objects, bank cards, digital IC cards, and ID cards cannot be placed between the transmitter and the mobile phone to avoid damage.

发射器与手机之间不可放置金属物质、银行卡、数字 IC 卡以及身份证等物品，以免损坏。

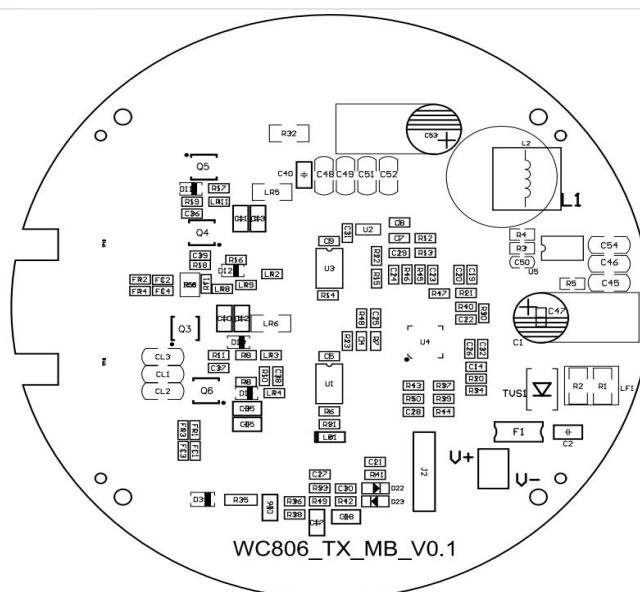
3. Do not place on a metal desktop for charging.

请勿放置金属桌面上充电。

4. Do not place the battery under high temperature or sunlight to charge it.

请勿放置高温、日照环境下进行充电。

### 10.2 Size description/尺寸说明

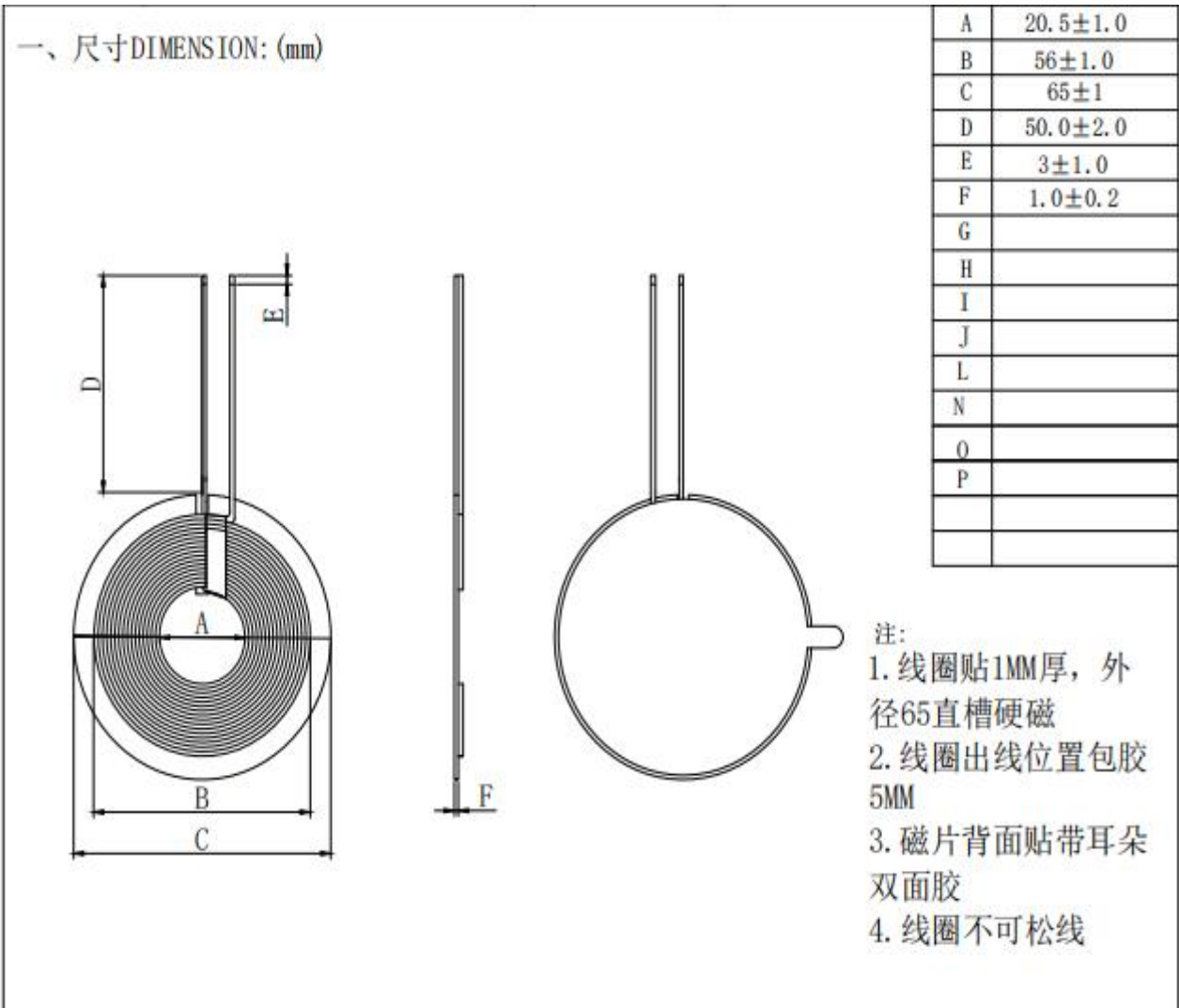


PCBA 版面图

PCBA Size (尺寸) : 直径 75\*1.0(±0.2)mm

10.3.Aluminum heat sink gauge Spec( slightly) 铝散热片规格（建议客人自行处理 Addbyyourself）

10.4 .Tx\_Coil Spec: TX 线圈规范



11. Other Features / 其他特性

11.1. Weight 重量

12. Inspection Standards/检查标准

| NO. | Test project   | Test standard | Sample Level                      | Test standard   |
|-----|----------------|---------------|-----------------------------------|-----------------|
| 1   | Performance    | 《SOP》、《SIP》   | MIL-STD-105E<br>(MA=0.65 MI=1.5 ) | Serious defect: |
| 2   | Size           |               |                                   | Main defect:    |
| 3   | Shell, Package |               |                                   | Petit defect:   |

13. Major Test Equipment/测试仪器

- 13.1. Oscilloscope/示波器 Tektronix MD03034
- 13.2. Electronic load/电子负载 IVYTECH 8711B
- 13.3. DC power supply/直流电源 GRATTEN APS3005D
- 13.4. Multi-function multimeter/多功能万用表 FLUKE 15B
- 13.5. Receiving end/接收端 BQ51020GPMQ9101A BQ5101
- 13.6. Temperature measuring instrument/温度测量仪 FLUKE VT04A