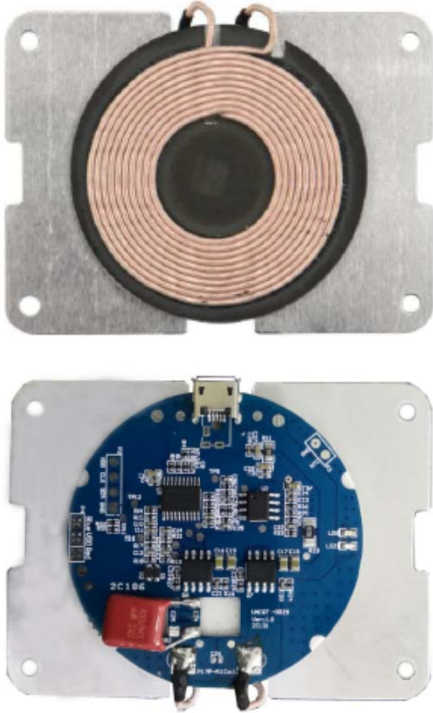


5W Wireless Charger Transmitter

Pulse Part Number WM5V

V04

Features



- WM5V is a WPC1.2.4 Qi (5W) wireless charging platform: Its transmission efficiency is up to 76% and can provide up to 5W transmission capacity. It enables powering or charging for any WPC-Qi certified products.
- It adopts intelligent identification system while its transmitter and receiver unit adopts UART (Universal asynchronous receiver/transmitter) encrypted transmission control signal which is stipulated by WPC1.2.4 The console will process the corresponding power adjustment based on the encoding of the receiving unit. This module has fulfilled the WPC1.2.4 Qi requirement and is certified by Qi.

Multiple LED indication scheme available for options

| LED | Operational States | | | | | |
|---------------|--------------------|---------|---------|-----------------|-------|------------------------|
| | Power on | Standby | Charger | Charge complete | Fault | Dynamic Power Limiting |
| LED1: RED | 0.5S | OFF | OFF | OFF | ON | Blink slow |
| LED2: BLUE | 0.5S | OFF | ON | OFF | OFF | OFF |

Contact: mobiledeviceantenna.sales@pulseelectronics.com

5W Wireless Charger Transmitter

Pulse Part Number WM5V

V04

1. Input Characteristics / 输入特性

1.1 Input Voltage & Frequency 输入电压&频率

| QC2.0/3.0 | Minimum 最小 | Normal 标准 | Maximum 最大 |
|-----------------------|------------|-----------|------------|
| Input Voltage/ 输入电压 | 4.75Vdc | 5.0Vdc | 5.5Vdc |
| Charging Mode 输出模式 | Qi_5W | | |
| Frequency 频率 | 110~205KHZ | | |

1.2. Input Current/输入电流

1.5Amax. @5.0Vdc Full load

1.3. Inrush Current (cold) /浪涌电流 (冷电流)

1.8Amax. @5.0Vdc Full load & Ambient temperature 25 °C

1.4. Energy Consumption/损耗

At 4.75VDC or 5.6VDC, Energy Consumption \leq 0.625W

2. Output Characteristics (Rx_Module) /输出特性

2.1. 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 | | Peak Load | Output Range 输出电压范围 | R+N/纹波+噪音 | Remark |
|--------|-----------------|-----------|-----------|------------------------|-----------------|--------|
| Power | Min. Load | Max. Load | | | | |
| 5W | 0.10A | 1A | 1A | 5V \pm 5% | \leq 100mVp-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。

2.2. Line & Load Regulation/线性&负载调整率

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

5W Wireless Charger Transmitter

Pulse Part Number WM5V

V04

3. Protection Requirement/保护要求

3.1. Short Circuit Protection/短路保护

When the output is short circuit to ground, the input power should decrease, the power supply remains undamaged and automatically recover when fault condition is removed

输出对地短路, 输入功率减少, 电源不得损坏, 并应自恢复时解除故障条件

3.2. Over Current Protection/过流保护

OCP Point Limited: 120%-130% auto restart

OCP 限制: 120% - 130% 自动重启

The output will be blocked when output is over-current, and should automatically recover when fault condition is removed

当电流输出过量时会有阻碍, 然后会自动恢复并解除故障。

4. Reliability Requirements/可靠性要求

4.1. Reliability Test/可靠性测试

| Test Items/测试项目 | Test conditions/测试条件 |
|---|---|
| Storage at high temperature test/ 高温存储 | +60°C 16Hrs |
| Storage at low temperature test/ 低温存储 | -20°C 16Hrs |
| Operating at high temperature test/高温操作 | +40°C 8Hrs |
| Operating at low temperature test/ 低温操作 | -20°C 8Hrs |
| High/low Temperature cycle test 高低温循环测试 | 40°C(2Hrs)→-20°C(2Hrs)→40°C(2Hrs) →-20°C(2Hrs) Continually work 24 Hours |

5W Wireless Charger Transmitter

Pulse Part Number WM5V

V04

4.2. Vibration Test /震动测试

Vibration Condition: vibration amplitude 2mm ;Vibration frequency :12.4Hz;Vibration direction :X, Y ;
Vibration time :30 minutes / pc 振动条件: 振动幅度 2mm; 振动频率 12.4Hz; 振动方向: X、Y;
振动时间: 30 分钟/个

4.3. Dropping Test/跌落测试

Test height: Determined by the weight level; Drop times: drop 10 times (one triangle ,3 edge, six surface);
Drop platform: 1~2cm thickness solid wood 测试高度: 由重量决定高度; 跌落次数: 跌落次数 10 次
(1 个角, 3 个边, 6 个面,) 跌落环境: 1~2 cm 厚的实心木板

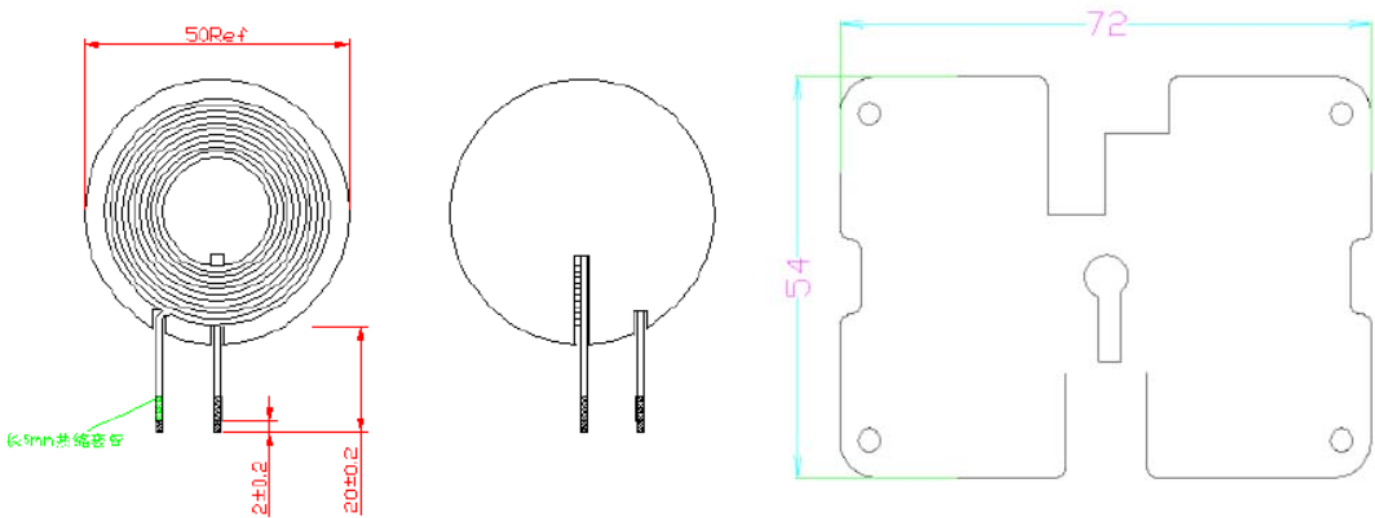
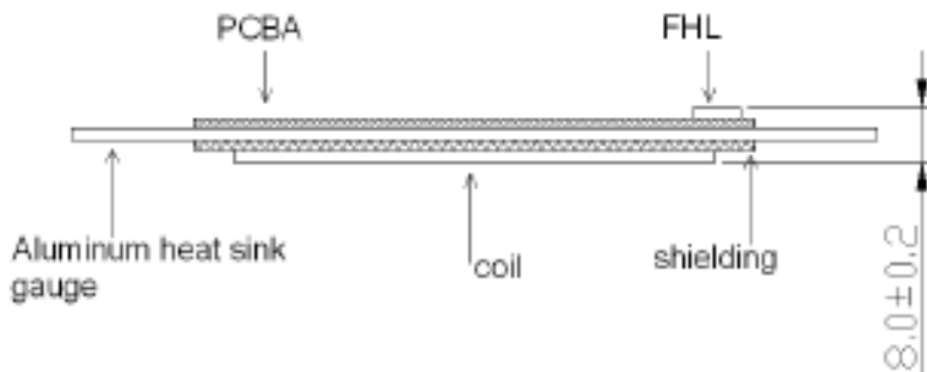
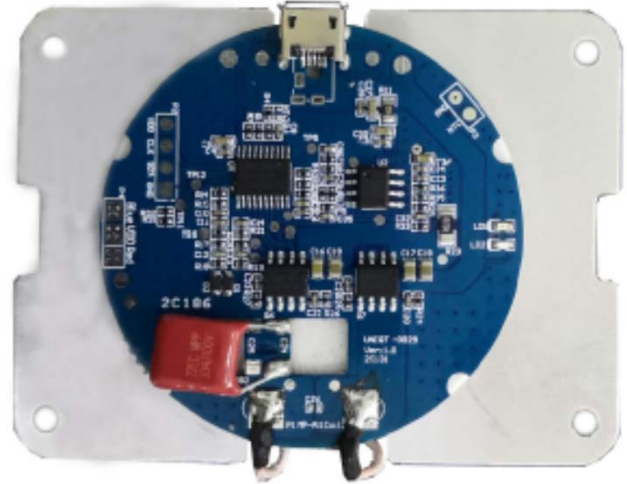
| Equal to or greater than | | But Less than | | Free Fall | |
|--------------------------|----|---------------|----|-----------|-----|
| lb | Kg | lb | Kg | In | mm |
| 0 | 0 | 21 | 10 | 30 | 760 |
| 21 | 10 | 41 | 19 | 24 | 610 |
| 41 | 19 | 61 | 28 | 18 | 460 |
| 61 | 28 | 100 | 45 | 12 | 310 |
| 100 | 45 | 150 | 68 | 8 | 200 |

5W Wireless Charger Transmitter

Pulse Part Number WM5V

V04

Mechanical dimensions



* All dimensions in mm

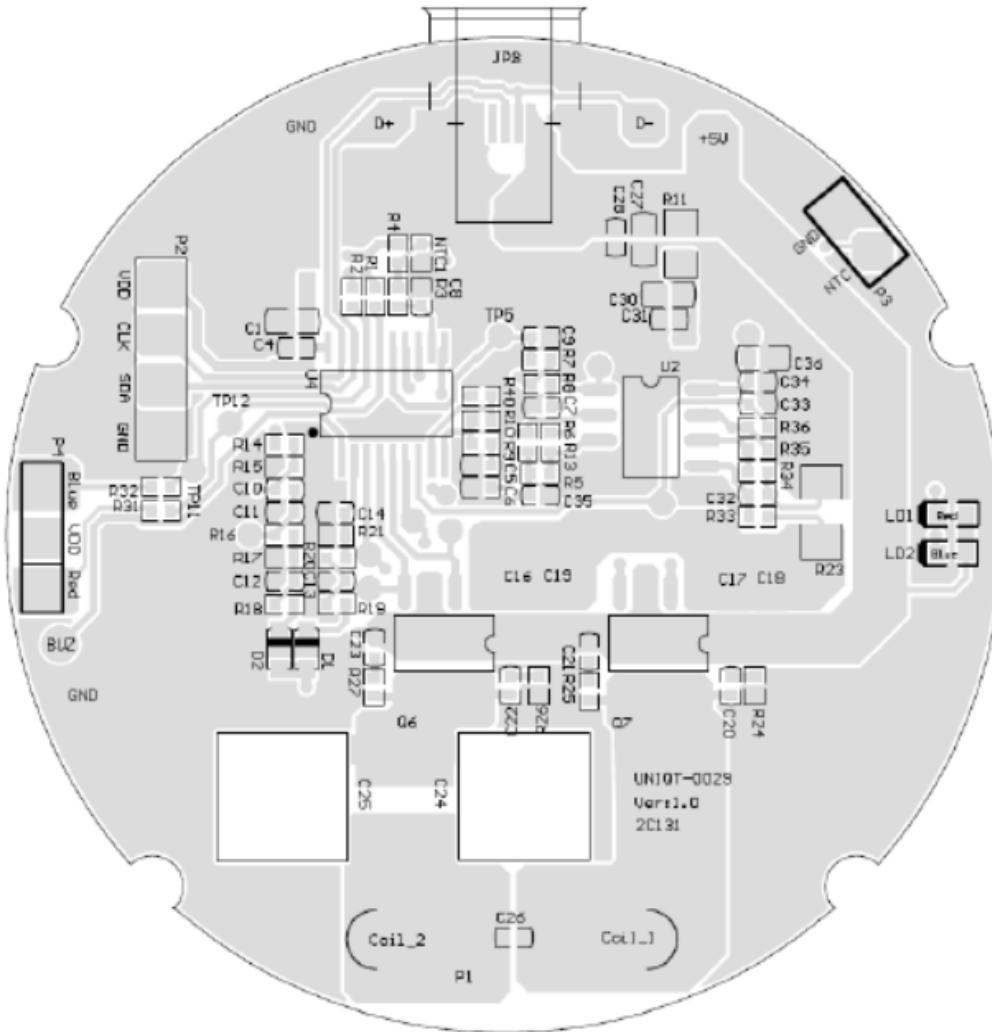
Contact: mobiledeviceantenna.sales@pulseelectronics.com

5W Wireless Charger Transmitter

Pulse Part Number WM5V

V04

Mechanical dimensions



PCB 图

PCBA : 50*50*1.0mm (±0.2)mm

| | | | | | |
|----------|----------|-------|----------|----------|-----------|
| Port | P3-1 | P3-2 | VDD | RED | BLUE |
| Function | NTC | GND | LED VCC | Red LED- | Blue LED- |
| Port | GND | D+/D- | Vin | CL1-1 | CL1-2 |
| Function | DC5V GND | | DC5V VDD | TX Coil | |

* All dimensions in mm

5W Wireless Charger Transmitter

Pulse Part Number WM5V

V04

Packing

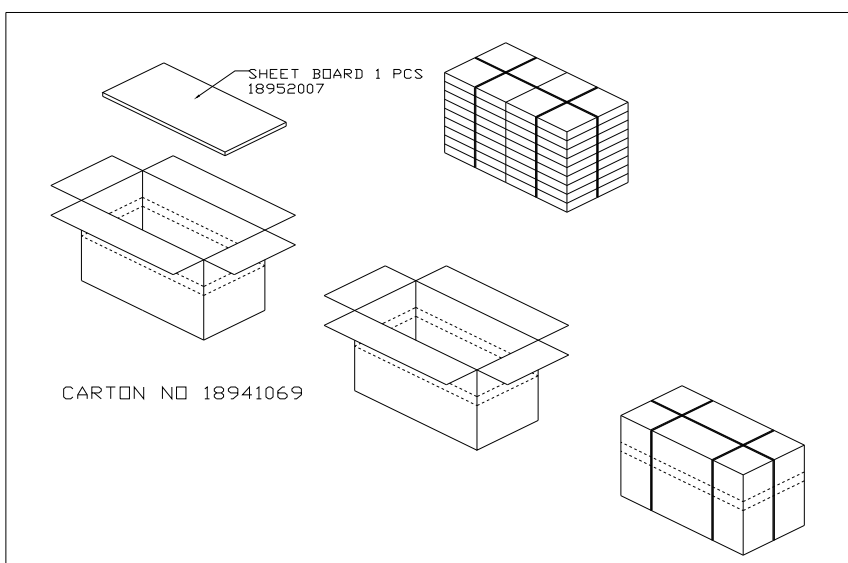
- Put 1pcs product in the poly bag, then add the info label.
- Align the finished goods into the tray.
- Cardboard sheet under and on the top of the tray stack in the tray stack. Every second tray must be rotated 180 degrees, binding of the stack-1 strap lengthwise and 2 strap crosswise.
- Add foam paper between two trays.
- First put down 1pcs sheet board in box, then put binding tray in box, empty 1 pcs on the top of the box.
- Binding of the carton: scaled with tape, 1 strap length wise and 2 strap crosswise.



Label content:

P/N:
Project Name:
Inductance:

- P/N, e.g. SWA1380
- Project Name, e.g. A6 Wireless Charge Coil
- Inductance, e.g. 12.5uH



Contact: mobiledeviceantenna.sales@pulseelectronics.com

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Wireless Charging Coils](#) category:

Click to view products by [Pulse](#) manufacturer:

Other Similar products are found below :

[WM5V](#) [WR383245-17F5-G](#) [SWC4242KB120-100](#) [IWAS3222CZEB190JF1](#) [WR222230-26M8-G](#) [146179-4011](#) [AWCCA107T52H40C01B](#)
[AWCCA-15N15H06-C01-B](#) [AWCCA-18R18H10-C01-B](#) [AWCCA-26R26H08-C01-B](#) [AWCCA-28R15H08-C01-B](#) [AWCCA-30N30H20-C01-](#)
[B](#) [AWCCA-36R36H08-C51-B](#) [AWCCA-37R37H18-C01-B](#) [AWCCA-42R38H08-C03-B](#) [AWCCA-50N50H16-C51-B](#) [AWCCA-50N50H30-](#)
[C21-B](#) [AWCCA50N50H35C01B](#) [AWCCA50N50H50C01B](#) [AWCCA53N53H50C01B](#) [AWCCA53N53H50C02B](#) [AWCCA-RX350300-101](#)
[AWCCA-RX404012-102](#) [DFR0712](#) [SWM1390](#) [SWW174N](#) [WMRR124F-1](#) [WMRR124F-2](#) [WMRR132F-0](#) [WMRR138F-0](#) [WMRR147F-1](#)
[WMRT130F-0](#) [WMRT399A-0](#) [BP3622](#) [WR111180-36F5-B1](#) [WR111180-49F5-G](#) [WR121210-27M8-ID](#) [WR202010-18M8-ID](#) [WR202010-](#)
[18M8-SM](#) [WR202020-18M8-G](#) [WR221230-36M8-G](#) [WR303050-12F5-ID](#) [WR303050-15F5-G](#) [WR444025-17M6-G](#) [WR464650-10K2-FS3](#)
[WR483245-15F5-G](#) [WR483265-13F5-G](#) [WR483265-15F5-G](#) [WR524825-17M6-NF-G](#) [WR524830-16F3-NF-G](#)