

## 无线充电线圈组—WCA 系列

### Wireless Charging Coil Assembly – WCA Series

Operating Temp. : -25℃~+85℃



#### 特征

- 符合 Qi 标准
- 尺寸, 形状, 特性可定制
- 厚度小
- 高机械强度
- 高温保护设计

#### FEATURES

- Qi standard compliance
- Size, shape, characteristics customized
- Low thickness
- High mechanical intensity
- High temperature protection design

#### 用途

- 便携电子产品如手机、平板电脑数码相机等的无线充电发射和接收模块;

#### APPLICATIONS

- Using for transmitter and receiver module of portable electronics device such as mobile phones, tablet PC and DSCs, etc.

#### 产品型号

#### PRODUCT IDENTIFICATION

**WCA**

①

**38R32**

②

**H10**

③

**C**

④

**01**

⑤

**B**

⑥

①

分类 Type	
WCA	无线充电线圈组 Wireless Charging Coil Assembly

②

外形尺寸(LxW) (mm) External Dimensions (LxW) (mm)	
50N50	50×50 方形或外径 50 圆形, N 表示通用于发射和接收端 50×50 square or OD=50 circular, N means can be used for both transmitter and receiver
38R32	38×32 矩形, R 表示应用于 接收端 38×32 rectangular, R means can be used for receiver
107T52	107×52 矩形, T 表示应用于 发射端 107×52 rectangular, T means can be used for transmitter

④

线圈材质 Coil Material	
F	柔性线路板线圈 FPC Coil
C	铜线绕制线圈 Copper Wire Coil

③

厚度 Thickness	
H10	厚度 Thickness 1.0mm
H31	厚度 Thickness 3.1mm

⑤

设计代码 Design Code	
01, 02, etc.	

⑥

包装 Packing	
B	盒装 Box

外观尺寸

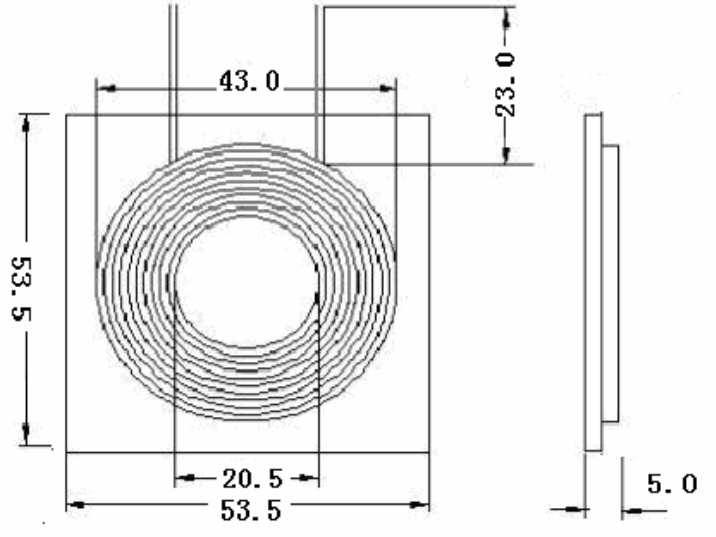
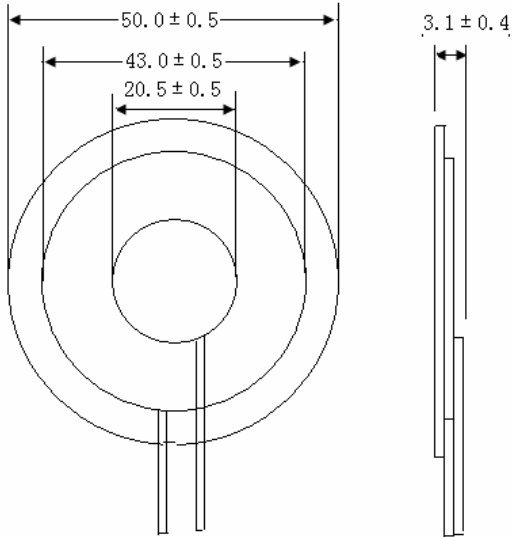
SHAPE AND DIMENSIONS

WCA50N50H31C01B

WCA53N53H50C01B

Unit: mm

Unit: mm



绕线规格 Winding Specification

绕线规格 Winding Specification

Coil Number	Wire	Turns
1	0.08x105	12

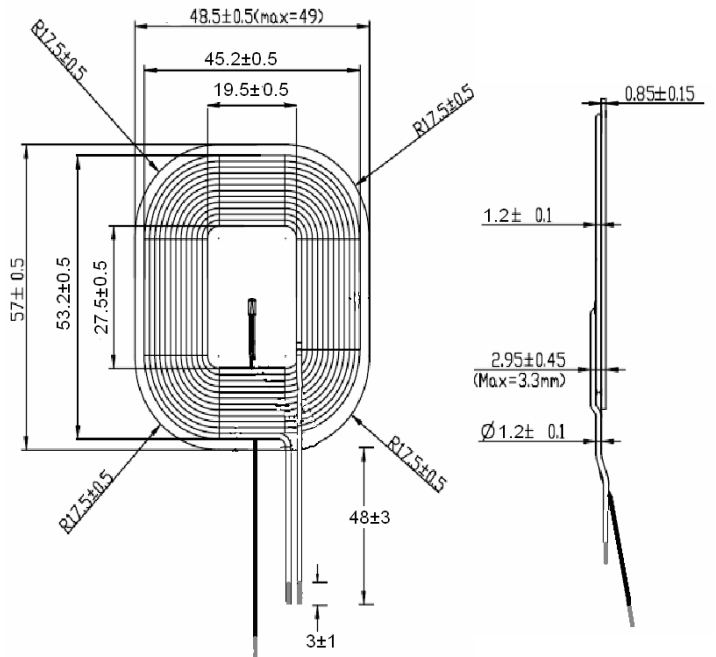
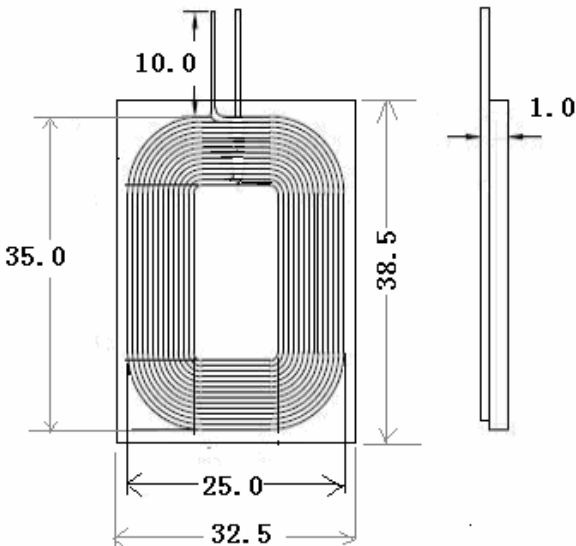
Coil Number	Wire	Turns
1	0.08x105	12

WCA38R32H10C01B

Unit: mm

WCA57N48H20C01B

Unit: mm



绕线规格 Winding Specification

绕线规格 Winding Specification

Coil Number	Wire	Turns
1	0.25x2	17

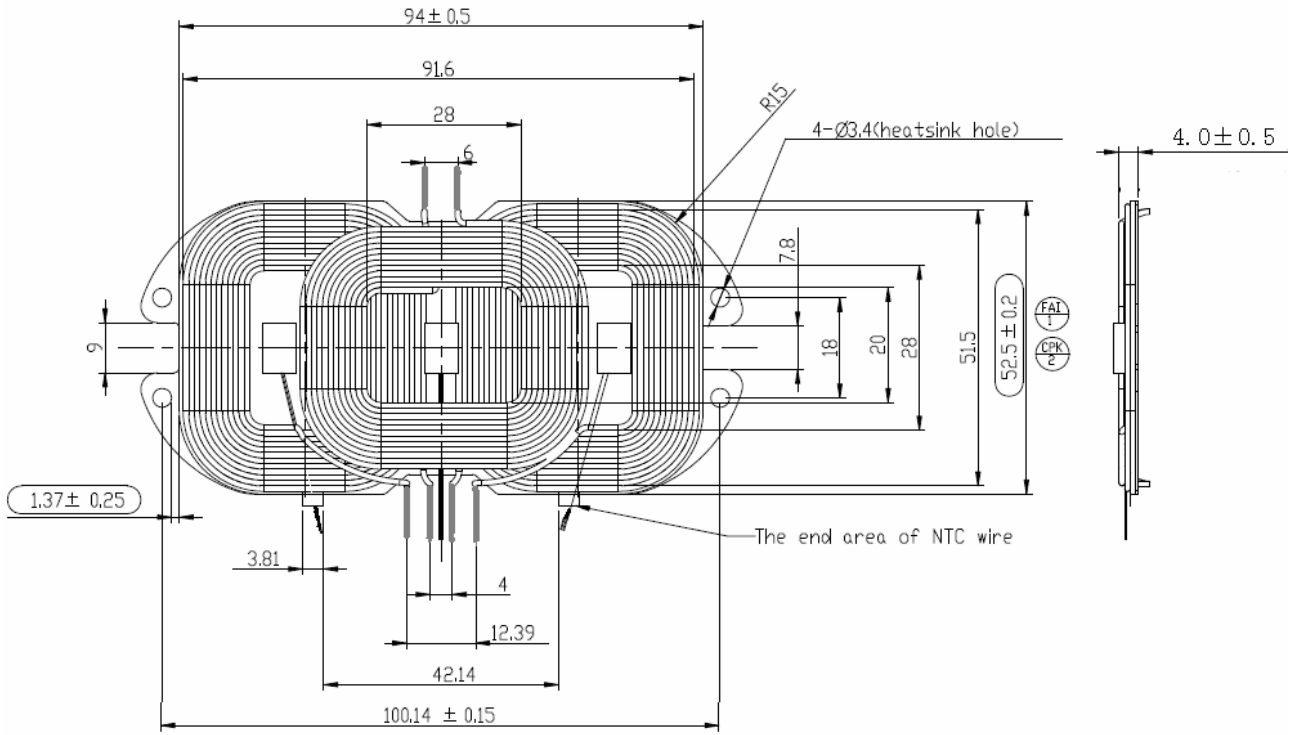
Coil Number	Wire	Turns
1	0.08x105	12

外观尺寸

SHAPE AND DIMENSIONS

WCA107T52H40C01B

Unit: mm



绕线规格 Winding Specification

Coil Number	Wire	Turns
3	Upper 1	0.08x100 12
	Lower 2	0.08x100 12

规格特性

SPECIFICATION

Part Number 型号	Inductance 电感	DC Resistance 直流电阻	NTC Thermistor R25 25°C 电阻
Test condition 测试条件	100kHz	20±15°C	Ta=25±0.05°C Pr≤0.1mW
Units 单位	uH	mΩ	kΩ
WCA50N50H31C01B	6.3±10%	45±20%	/
WCA53N53H50C01B	25.3±10%	77±20%	/
WCA38R32H10C01B	11.1±10%	250±20%	/
WCA57N48H20C01B	11.5±10%	60±20%	10±3%
WCA107T52H40C01B	Upper 11.5±10% / Lower 12.0±10%	56±20%	10±3%

定制化产品说明

CUSTOMIZED PRODUCT PRESENTATION

我们可以定制符合 Qi 标准或根据客户要求的无线充电线圈组，请参考如下可定制特性范围：

We can customize wireless charging coil according to Qi standard or your requirements. Please refer to the following feature ranges:

Inductance Range 电感范围	DC Resistance Range 直流电阻范围	Dimensions Range 尺寸范围	Thickness Range 厚度范围
uH	mΩ	mm	mm
1-100	10-1000	10-200	0.4-10

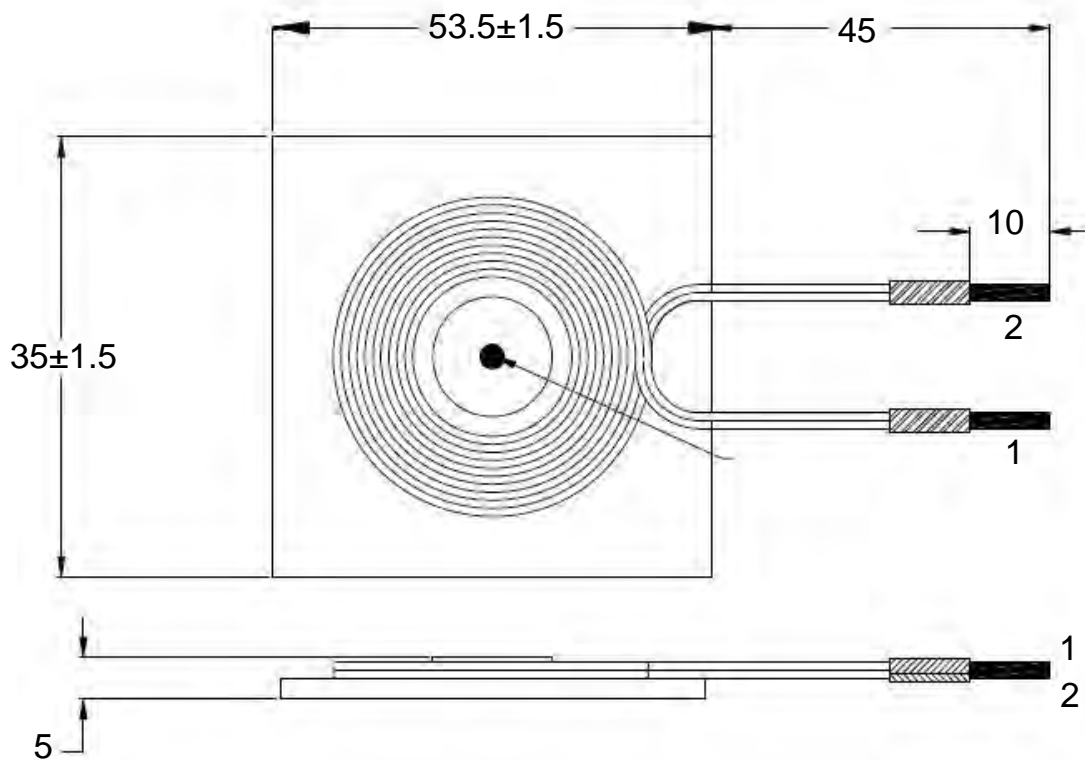
## 1. Features

1. Wireless Power Consortium (WPC) Type A5 Transmitter Coil
2. 100% Lead(Pb)-Free and RoHS compliant.
3. High Current, Low DCR, High Efficiency.

## 2. Applications

1. Qi-Certified Smart Phones and other Handhelds
2. Hermetically Sealed Devices and Tools
3. Cars and Other Vehicles
4. Tabletop Charge Surfaces

## 3. Dimensions



Unit:mm

#### 4. Air coil specification

1. Wire Diameter:  $\phi$  0.08mm x 105 ( Type2 Wire)
2. Coil Turns: 10TS ,2 layer

#### 5. Electrical Specifications

NO.	Parameter	Specification	Test Instrument
1	Inductance	6.3 $\mu$ H $\pm$ 10%	K2812 DIGITAL LCR METER or EQUIVALENT (@1kHz 1.0 Vrms)
2	Q Value	80(Typ.)	JK2812 DIGITAL LCR METER or EQUIVALENT (@1kHz 1.0 Vrms)
3	DC Resistance	0.016 $\Omega$ (Typ.) (At 25°C)	JK2812 DIGITAL LCR METER or EQUIVALENT (@1kHz 1.0 Vrms)
4	Saturation current	16A(Typ.)	Isat
5	Weight	47g(Typ.)	

#### 6. Temperature Characteristics

NO.	Parameter	Specification
1	Operating Temperature	-30~70°C
2	Storage Temperature	-40~85°C