



Product specification

DOC NO : SPEED-T-IH10V3
REV.: A/03

Product specification

Customer : **iHome**

Product Model : **T-IH10V3**

Part Number : _____

Product Type: **Wireless charging transmitter module**

FW Version: _____

ISSUED BY	CHECKED BY	APPROVED BY

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REVISED HISTORY

NO.	REV.	REVISED CONTENT	REVISDE REASON	DATE
1	00	To establish specification		
2	01	Upgrade to support WPC1.3		2021.9.22
3	02	Update screw position and thickness size, increase noise reduction capacitor		2021.9.29
4	03	Update Qi Certification Z distance to 2.5mm		2021.12.01
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1、 PRODUCT DESCRIPTION

This is a Qi-BPP5W & PPDE10W output power wireless charging transmitter for handphone design by INJOINIC IP6806 solution, and transmitter coil comply with WPC A11a type. It get the power from 9V power supply. Transfer electricity to the wireless charging phone, that will be charged by electromagnetic wave. It uses a controlled technology, which can realize low power standby, Foreign Object Detection (FOD), Over Temperature Protection (OTP).

2、 PRODUCT SPECIFICATION

2.1 Electrical Performance Specifications

Parameter		Notes and Conditions	Specification
VIN	Input Voltage	Minimum	8.85V
		Typical	9.0V
		Maximum	9.25V
IIN	Standby Current	VIN = 9V	35mA/ Max
	Max Input Current	VIN = 9V	1.8A
POUT	Output Power	VIN = 9V, VOUT=9V	* 10W-PPDE
		VIN = 9V, VOUT=5V	* 5W- BPP
VOUT	Output Ripple	VIN = 9V, IOUT = Max	200mVpp
FS	Switching Frequency	Switching frequency varies with load	110~148kHz
ηpk	Peak efficiency	VIN = 9V; POUT = 10W	* 75%
Z	Z Distance	The effective distance between the transmitter coil and receiver coil	8mm / Max
	Qi Certification Z distance	The distance between the transmitter coil and wireless charging area surface	2.5mm
OTP	Over TEMP. Protection	The temperature when cut off the output	65±5℃
	Rework Temperature	The temperature when the output rework	50±5℃

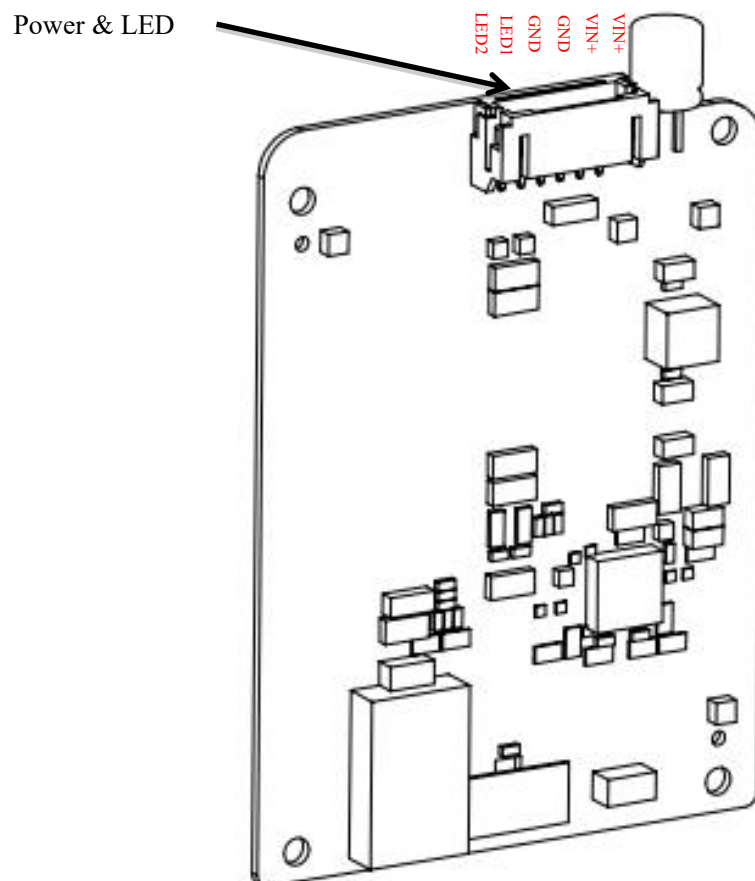
* The output power test using test fixture, e.g. CPS510ATE-01(T60)

2.2 Wireless charging icon display

2.3

LED2	LED1	Status
0	0	Charging Error or FOD triggered
0	1	Full Charged
1	0	Charging on progress
1	1	Stop Charge

Connector pin assignment



3、 ENVIRONMENTAL REQUIREMENT

3.1 Operating Temperature:

0°C ~50°C, Full load , Normal operation.

3.2 Storage Temperature:

-20°C ~ 85°C

3.3 Relative Humidity:

5% (0°C) ~90% (40°C) , Full load , Normal operation.

4、 SAFETY REQUIREMENT

4.1 INSULATION RESISTANCE

INPUT Connector to GND: The insulation resistance should be a minimum of 10 M Ω, test voltage 500 V_{DC}.

4.2 DIELECTRIC WITHSTANDING VOLTAGE

INPUT Connector to GND: 500V_{rms} at seal level for one minute. No breakdown or flashover permitted.

5、 EMC REQUIREMENT

5.1 EMI standard

Meets the limits of

Shall meet the radiated and conducted emission requirements for FCC part 15 class B rules

5.2 ESD Standard

Meets the limits of IEC61000-4-2 Electrostatic Discharge (ESD)

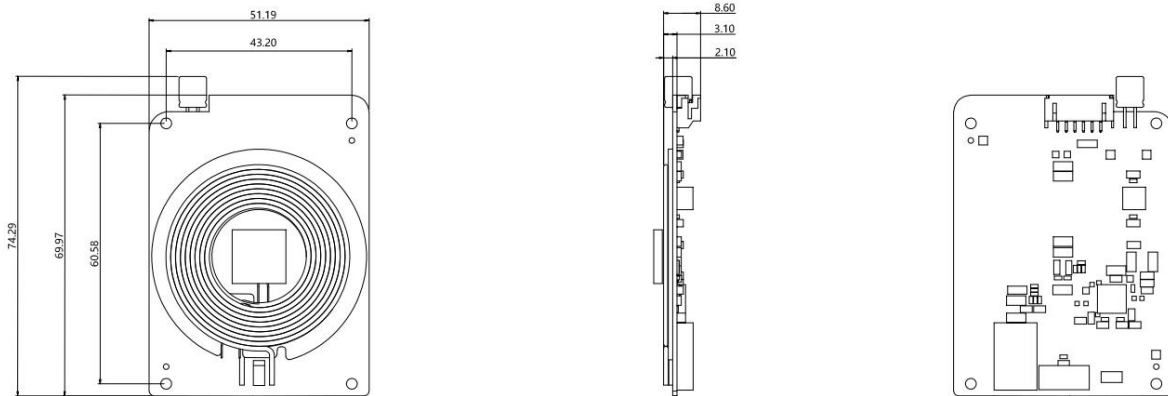
Static – discharge test by contact or air should be conducted with Static – discharge tester, energy storage capacitance of 150pF, and discharge resistance of 330Ω.

8KV air discharge, 4KV contact discharge, Performance Criterion B.

6、 STANDARDS AND REGULATION

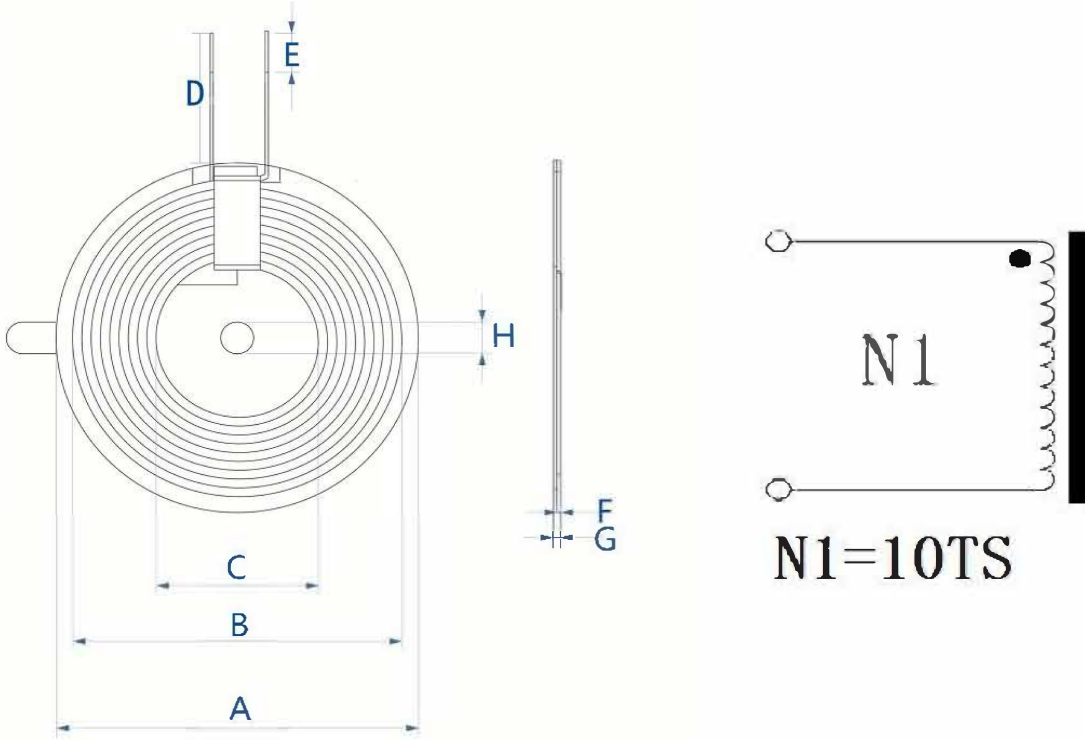
Criteria	Value	Remark
FCC compliant	Yes	
CE-RED compliant	Yes	
Qi compliance	Yes	WPC v1.3 BPP &PPDE
RoHS2.0 compliant	Yes	10 substances
REACH compliant	Yes	

7、MECHANICAL CHARACTERISTICS



	产品规格书 Product Specification		编号/Code	FCW-568-1
			版本/Ver.	A/0
			页数/Page	
客户编号 Customer Code	FCW-568	品名 Product Name	A11 无线充线圈 (带槽)	
产品规格 Specification	20.5*43*0.08*105P*10TS- 50磁片+普通背胶	绕线模具规格 Winding Tool	单线单层	

Product Size:



单位: mm

	A	B	C	D	E	F	G	H	I	J	K	L
尺寸Size	50	43	20.5	16	4	1.35	2.8	5.3				
公差Tolerance	±1	±2	±0.5	±1	±1	max	max	±0.5				