## SPECIFICATION FOR APPROVAL

CUSTOMER NAME:	10W Rx Receiver Module	
CUSTOMER ITEM:		
PRODUCT MODEL:	JY-R3-0502 _Rev.1.00	
APP Date :		
	APPROVAL SIGNATURE	
Please return to us one co	opy of "SPECIFICATION FOR APPROVAL" with you approved s	signature.

APPROVED	SALES BY	QUALITY ASSURE	ENGINEERING

# CATALOG

1.	Scope
2.	Product Characteristic
3.	Input Characteristics
	3.1. Input Voltage & Frequency
	3.2. Standby Current Consumption
4.	Output Characteristics
	4.1. Static Output Characteristics <vo &="" r+n=""></vo>
	4.2. Line & Load Regulation
5.	Protection Requirements
	5.1. Short Circuit Protection
	5.2. Over Current Protection
6.	Reliability Requirements
	6.1. Reliability Test
	6.2. Burn-in
	6.3. Vibration
7.	Environment Requirement
	7.1. Operating Temperature and Relative Humidity
	7.2. Storage Temperature and Relative Humidity
8.	Photo of Product
9.	Exterior Features
10.	Major Test Equipment

### 1. Scope

- 1.1 The purpose of the document is to specify the functional requirement of a Wireless Power Supply's Rx Receiver Module
- 1.2 The Wireless Power supply's Tx Module shall meet the ROHS requirement.

#### 2. Product Characteristic

JY-R3-0701 is a 10W wireless power receiver module: Its conversion efficiency is up to 75% and can provide up to DC 5V/2.0A transmission capacity.

System operation frequency from 50KHz to 500KHz.

Once the RX Receiver is identified, the Tx Module will output power by automatic adjustment.

Provide the protection of power overload and metal sensing.

LED light indicates the working activity.

LED indication light:

- ① LED is OFF no power;
- ② Green LED (LED1) is ON flashing -operating mode;

## 3. Output Characteristics

#### 3.1. Static Output Characteristics <Vo & R+N>

Output	Rated Load		Peak Load	Output Range	R+N	Remark
Voltage	Min Load	Max Load				
5VDC	0A	2A	2.2A	5V±5%	<200mVpp	

Note: Ripple & Noise: Measurement is done by 20MHz bandwidth oscilloscope and the output paralleled a 0.1uF ceramic capacitor and a 10uF electrolysis capacitor.

#### 3.2. Line & Load Regulation

Output	Load Condition		Line Regulation	Load Regulation	Remark
Voltage	Min Load	Max Load			
5VDC	0A	2A	±5%	±5%	

### 4. Protection Requirement

#### 4.1. Short Circuit Protection

The input power shall decrease when the output is short to GND, the power supply shall not damage, and shall be self-recovery when the fault condition is removed.

#### 4.2. Over Current Protection

OCP Point Limited: 120%-150% auto restart

The output shall hiccup when the over current applied to the output, and shall be self-recovery when the fault condition is removed.

## 5. Reliability Requirements

#### 5.1 Reliability Test

Test Items	Test conditions	Test quantity
Storage at high	+80°C 16 Hrs	2PCS
temperature test		
Storage at low	-20℃ 16 Hrs	2PCS
temperature test		
Operating at high	+45°C 8 Hrs	2PCS
temperature test		
Operating at low	-20℃ 8 Hrs	2PCS
temperature test		
Low Temperature turn	EUT should start-up normally	2PCS
on test	after storage at 0°C of 2 hours	
	under minimum input voltage and	
	maximum load.	
High/low Temperature	$45^{\circ}C(2Hrs) \rightarrow 40^{\circ}C(2Hrs) \rightarrow 45^{\circ}C$ $(2Hrs) \rightarrow 40^{\circ}C(2Hrs)$	2PCS
circle test	Continually work 16 Hours	
Constant Temperature	+25 ℃ 80%RH,continually	2PCS
turn on test	operating 48 hours	

#### 5.2. Burn-in

4 hours at  $40^{\circ}C(+/-5^{\circ}C)$ , Nominal input voltage, Nominal load.

#### 5.3. Vibration

10 to 300Hz sweep at a constant acceleration of 1.0G (Breadth:3.5mm) for 1Hour for each of the perpendicular axes X,Y,Z

### 6. Environment Requirement

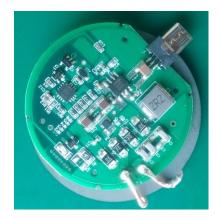
### 6.1. Operating Temperature and Relative Humidity

 $0^{\circ}$ C to  $40^{\circ}$ C 20%RH to 80%RH @Sea level shall below or no more than 10000 feet.

### 6.2. Storage Temperature and Relative Humidity

-30  $^{\circ}$ C to + 70  $^{\circ}$ C 10%RH to 90%RH(non-condensing) @Sea level shall below 30000 feet.

# 7. Photo of Product





## Description:

- 1. The distance between Tx Coil with PCB and other metal components is Min: 5.0mm
- 2. The surface distance between Tx Coil and Rx Coil is 3 -5mm.

## 8. Exterior Features

#### 8.1. Size

L\*W\*H

PCBA: 46\* 46 \* 3 mm

Coil + Shielding: 50\* 50\*3 mm

# 9. Major Test Equipment

- 9.1. DC Supply
- 9.2. Tx\_Module: JY-T3-0701
- 9.3. ELECTRONIC LOAD
- 10.4. OSCILLOSCOPE
- 10.5. Logical Analyzer