

Data Sheet

# ZLG9021P0-1-TC

Bluetooth

DS01010101 V1.00 Date: 2016/4/14

Data Sheet

Typ	Content
Seywords	ZLG9021P0-1-TC, Essential information
Summary	Brief introduction to the basic parameters of the module



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## 1. Basic information

Product name: BLE Wireless transmission module

Model: ZLG9021P0-1-TC

ZLG9021P0-1-TC's pin assignment diagram and physical diagram are shown below

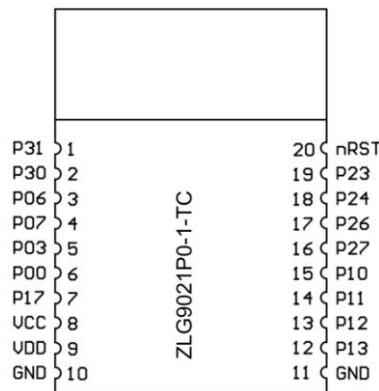


Fig1.1 Pin assignment diagram



Fig1.2 Physical diagram

## 2. Mechanical Dimensions

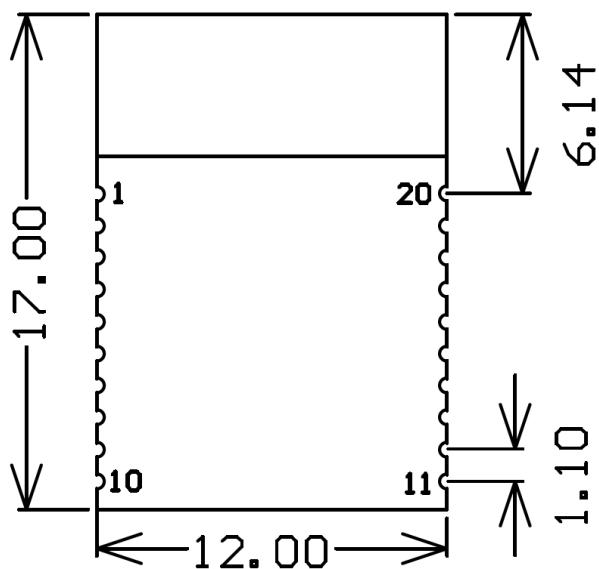


Fig2.1 Size

Notes: [1]Length and width dimension tolerance.minimum value 0.2mm,Typical value 0.3mm,Maximum value 0.4mm .

[2]Thickness:  $1.8\text{mm} \pm 0.15\text{mm}$ .



### 3. Electrical Parameters

#### 3.1 Working Conditions

Table3.1 Operating conditions

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
VCC	Power supply	relative to GND	2.4	3.3	3.6	V
VDD	Power supply	relative to GND	2.4	3.3	3.6	V
T <sub>A</sub>	working temperature	-	-40	+25	+85	°C

#### 3.2 Power Parameter

Table3.2 Power current

Ambient temperature: 25 C working voltage: 3.3V working mode: LDO mode

Symbol	Working mode	Typ	Unit
Current	deep sleep	2.32	µA
	sleep normal	3.29	µA
	Tx mode @0dbm <sup>[1]</sup>	16	mA
	Rx mode <sup>[2]</sup>	14	mA

Notes: [1] Send the condition for the carrier to send continuously;

[2] Receiving condition is continuous.

#### 3.3 Wireless Parameters

Table3.3 RF receiver characteristics

Symbol	Condition	Typ	Unit
wireless parameters	frequency range	2400 ~ 2483.5	MHz
	output power	-20 ~ 4	dBm
	Output power adjustment step	2	dB
	Rx sensitivity	-93	dBm
	maximum input signal level	0	dBm



## 4. Typical Application Circuit

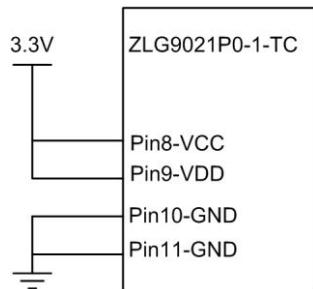
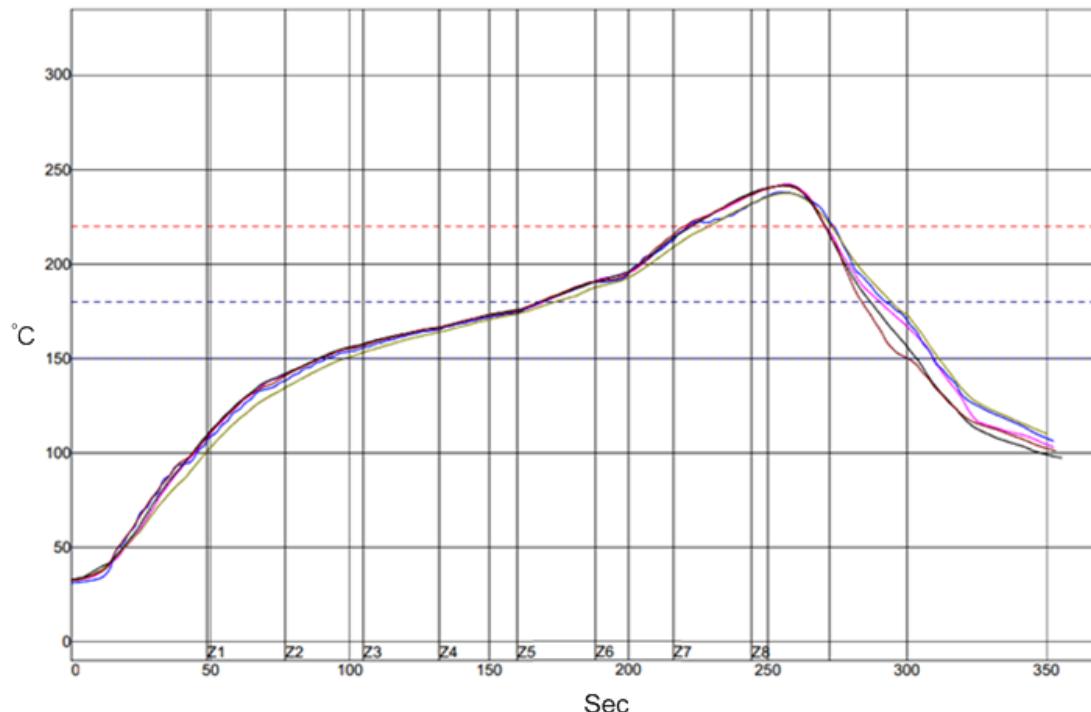


Fig4.1 Typical application circuit

Notes: Module internal integrated RC reset circuit.

## 5. Classification reflow profiles

温度设置 (摄氏度)								
温区	1	2	3	4	5	6	7	8
上温区	170	180	180	180	190	210	275	270
下温区	170	180	180	180	190	210	275	270
传送带速度 (毫米/分):	720							





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## 7. Important compliance information for North American users

The ZLG9021P0-1-TC Module has been granted modular approval for mobile applications. Integrators may use the ZLG9021P0-1-TC Module in their final products without additional FCC certification if they meet the following conditions. Otherwise, additional FCC approvals must be obtained.

1. At least 20cm separation distance between the antenna and the user's body must be maintained at all times.
2. To comply with FCC regulations limiting both maximum RF output power and human exposure to RF radiation, the maximum antenna gain including cable loss in a mobile-only exposure condition must not exceed 5dBi in the 2.4G band.
3. The ZLG9021P0-1-TC Module and its antenna must not be co-located or operating in conjunction with any other transmitter or antenna within a host device.
4. A label must be affixed to the outside of the end product into which the ZLG9021P0-1-TC Module is incorporated, with a statement similar to the following: For ZLG9021P0-1-TC Module: This device contains FCC ID: 2A1VAZLG9021.
5. A user manual with the end product must clearly indicate the operating requirements and conditions that must be observed to ensure compliance with current FCC RF exposure guidelines. The end product with an embedded ZLG9021P0-1-TC Module may also need to pass the FCC Part 15 unintentional emission testing requirements and be properly authorized per FCC Part 15.

Note: If this module is intended for use in a portable device, you are responsible for separate approval to satisfy the SAR requirements of FCC Part 2.1093.

### FCC NOTICE:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### FCC Radiation Exposure Statement:



This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The module in this product is labeled with its own FCC ID and IC No.. The FCC ID and IC is not visible when the module is installed inside another device. Therefore, the outside of the device into which the module is installed must also display a label referring to the module. The final end device must be labeled in a visible area with the following

“Contains FCC ID: 2AIVAZLG9021”

**Caution:**

The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.