# Antenna sample admission letter

# The Main Antenna Samp le Confirmation

Customer Name				
Project Name	The ANT wire ant	The ANT wire antenna		2023-2-23
Material Number	2.4G antenna (white)	Notes	Electr	onic wire
Frequency Range	Bluetooth 2.4G (2400 MHz-2500 MHz)			
Designed By	RF Engineer		Structural	Enginer
	Engineering Manager			
Checked By				
Customer Confirmation				
Client 's				
Approva I				

design unit:

Address: Chenghai, Guangdong, China

#### 1 The wire internal material

main material	range of application	remarks
Clear PVC-adhesive material	Outside of the wire is used	environmental protection
copper wire	Lead conductor copper diameter of O. 14	environmental protection
Environmental tin	The wire is covered with tin	environmental protection

#### 2 Product performance

Specifications and dimensions

name of a part	scope of application	wire length	Wire color	surface
2.4G antenna (white)	The ire on the board	35MM	white	No surface damage, scratch Traces, oil stains and other defects

#### 3 Wire performance

	order number	project	standard
1		withstand voltage	60V
2		Current resistance	1500MA
3		contact resistance	30m Q MAX
4		insulation resistance	1000m Q MIX
5		pulling	0.9 Kg
6		temperature resistance	80 Degrees

#### 4. Reliability test

order	project	standard	test method
number			
1	Excluding 16P and ROHS	The 16 components	Third-party
		were less than 0.	authoritative testing
		170	agency (such as:
			SGS)

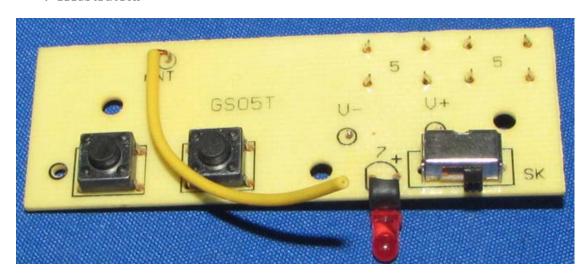
#### 5 The shelf life

 $\boldsymbol{6}$  months after the delivery

#### 6 Notes for use

Note: The temperature should not exceed  $80\,^{\circ}\!\text{C},$  and the current should not be above 1.5A.

#### 7 Illustration



Note: 2.4G antenna specification is 7 core 0. 14 copper diameter bare copper wire outer wire diameter 1.3MM wire, white, length of 35MM, wire head peeling 3MM tin. Meet the environmental protection standards: EU EN 71 (19E), ROHS, PAHS, 6P  $^{\sim}$  16P, Europe and America CPSIA 、HR 4040。

#### 8 Appendix

# **Product Specification**

A .Electrical Characteristics Frequency 2400MHz ~2500MHz VSWR <3.0

Efficiency >30% Impedance 50 Ohm Polarization Line Gain 2DBi

B .Material & Mechanical Characteristics

Material of Radiator Cu Cable Type 1.0 19P in white Connector Type: NO

**D** imension C .Environmental

Operation Temperature - 30  $^{\circ}C$   $\sim\!$  + 80  $^{\circ}C$ 

Storage Temperature - 30 °C ~ + 85 °C

### **Test Equipment & Conditions**

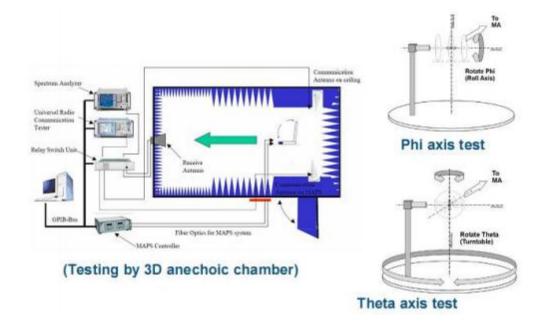
1. Network Analyzers:

Agilent 8753D 5071B

2. Communications Test Set:

## Agilent E 5515C

# 3. 3D Chamber Test Syste m Effiency & Gain



# Effiency & Gain

 2.40
 2.00

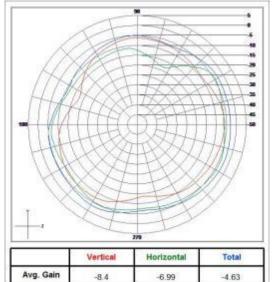
 .4402
 1.11

 2.48
 1.30

Peak Gain

-5.48

# **Radiation Pattern**



-3.77

-2.17

