



Customer	佳利得
Project	TWS948
Antenna Revision	A0
Prepared by	18814303605
Checked by	
Date :	2024. 10. 24

2.TestSystem

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5071C
OTA Test	TRP&TIS	Agilent 8960 & CMW500
Gain & Efficiency	Gain & Efficiency	Agilent 5071C



Purpose

This report is to measure the performance of antenna for **TWS948** The antenna operating frequency at 2400MHz-2500MHz 。 All test data are showed as below.

Content

1. Product Overview & Dimension
2. Test system
3. Antenna Specifications
4. Matching Diagrams
5. Test Result
 - 5. S11 Parameter-VSWR**
6. Test Result
 - 6. Gain & Efficiency**

Antenna Specifications 3.1

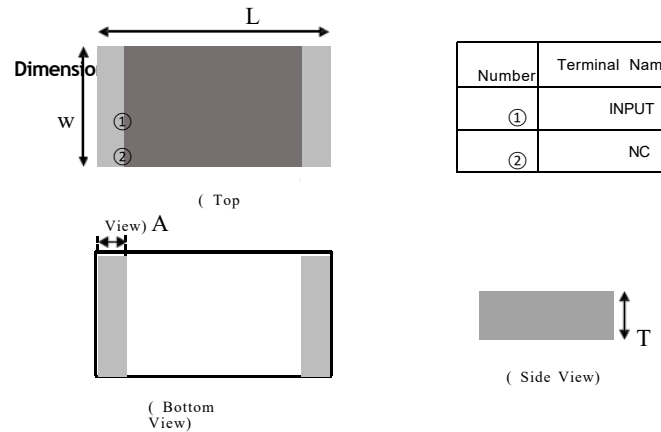
P/N:HLX160808D06

Features

- 1.Surface Mounted Devices with a small dimension of 1.6 x 0.8 x 0.8 mm meet future miniaturization trend.
- 2,Embedded and LTCC (low temperature co-fired ceramic) technology is able to integrate with system design as well as beautifying the housing of final product.
- 3.High stability and low tolerance.

Applications

1. Bluetooth
2. Wireless LAN
3. ISMband 2.4GHz wireless applications

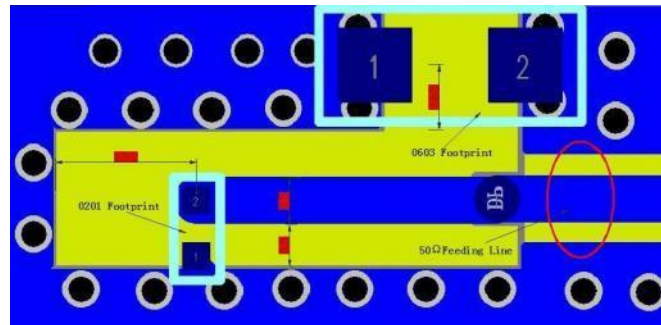
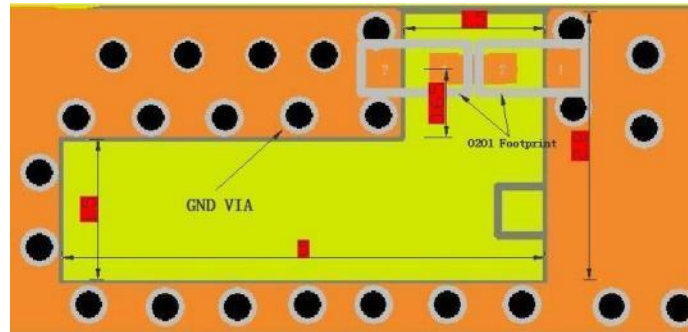


Symbols	L	W	T	A
Dimensions	1.60±0.20	0.80±0.20	0.80±0.20	0.30±0.10

Antenna Specifications 3.2

P/N:HLX160808D06

Evaluation Board and Matching
Circuits



Room 1004, Jinhuan Building, No. 56 Tiezai Road, Xixiang
Street, Bao'an District, Shenzhen City, Guangdong Province

Antenna
Specifications 3.3

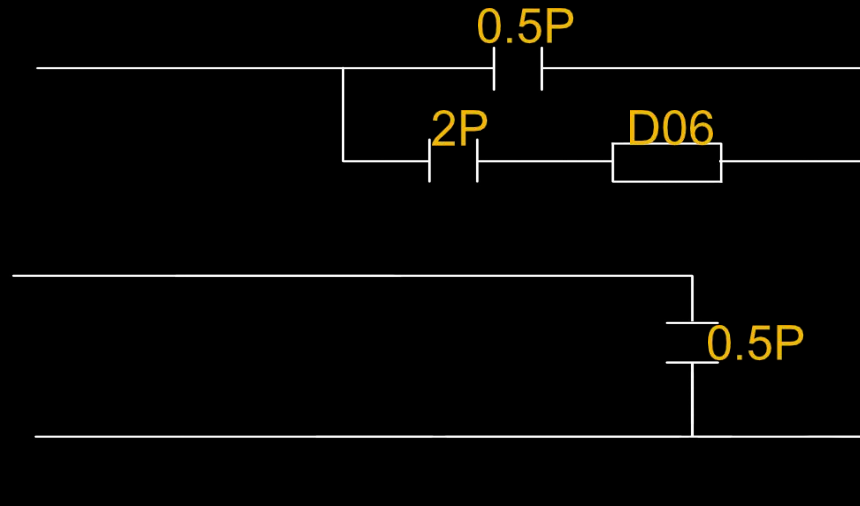
P/N:HLX160808D06

S11-Parameter

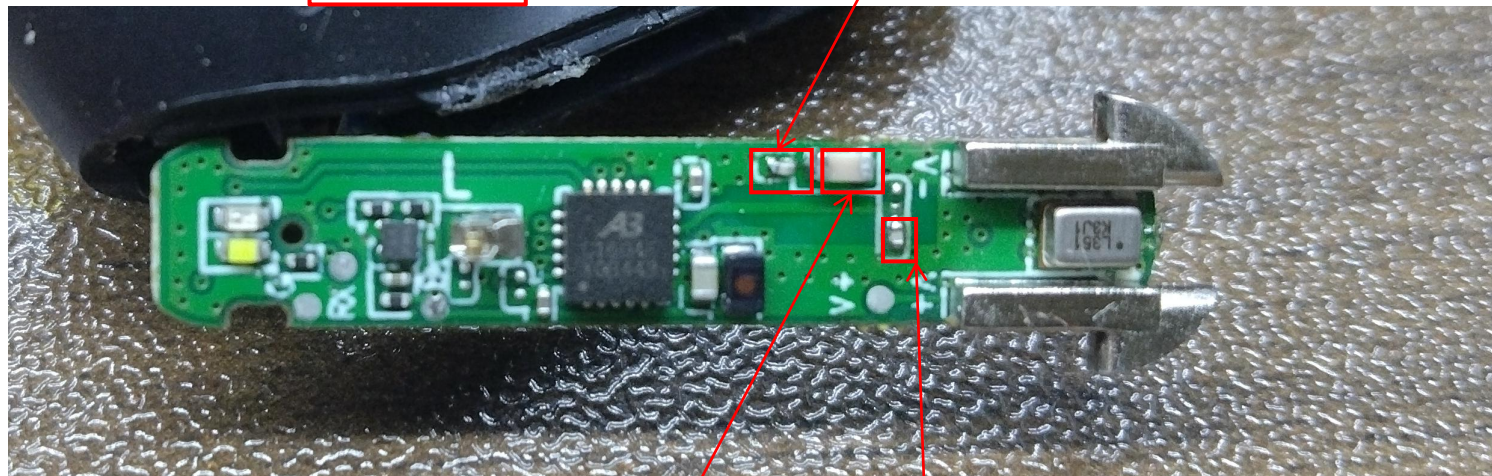
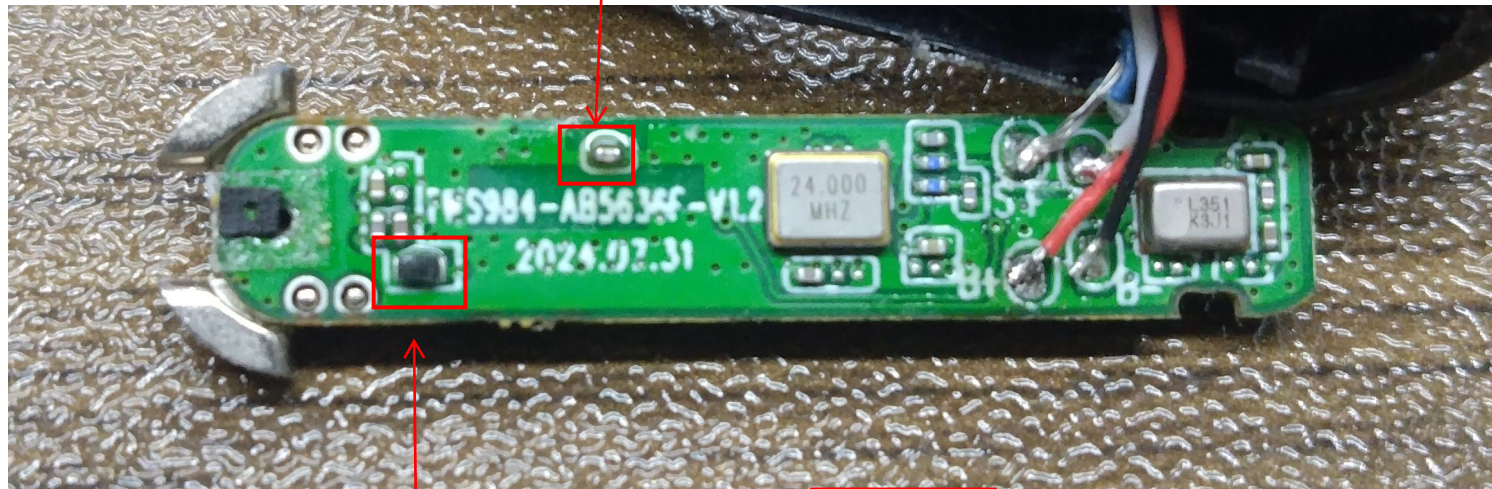


Frequency(MHz)	2400	2450	2480	2500
VSWR	1.56	1.16	1.48	1.79

Matching 4.1



Matching 4.2



6. Test Result

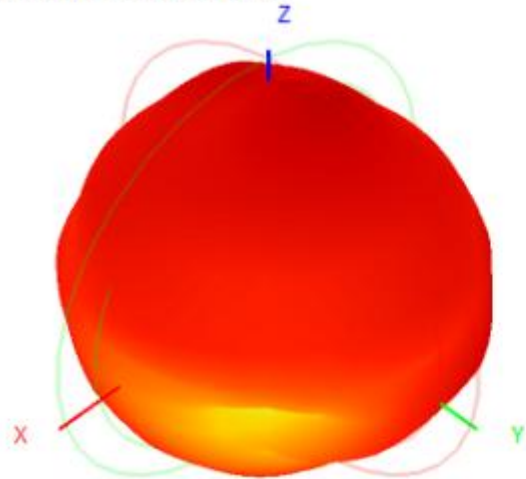
6.1 Gain & Efficiency—**ANT**

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	40.54	0.20
2410	41.31	0.21
2420	41.10	0.31
2430	42.04	0.35
2440	43.90	0.62
2450	43.07	0.65
2460	42.81	0.60
2470	41.06	0.45
2480	40.18	0.33

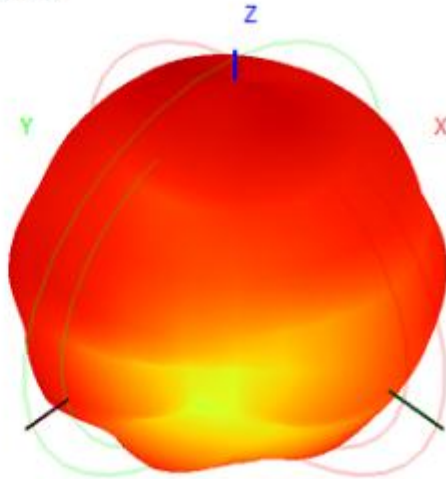
6. Test Result

6.1 2D Pattern—BTANT

2450.0MHz Total, Eff: 43.07%



Back View



Thank you!