

SPECIFICATION
APPLICATION FOR APPROVAL

PART NAME : PCB ANTENNA/ANTP1-CE0600B5
DATE : 2022/09/28

Release : Full release

Customer Approval	
Program Manager	R & D director
Supplier Approval	
Program Manager	R & D director
郝井强	孙高鹤

Confidential

This message contains information that may be confidential and privileged. Unless you are the addressee (or authorized to receive messages for the addressee), you can not use, copy or disclose to any third party or any information contained in the message. If you have received the message in error, please advise the sender by reply e-mail and delete the message. Nothing in this message should be interpreted as a digital or electronic signature that can be used to authenticate a contract or other legal document. Thank you very much.

NTS

0.	DEFINITIONS	1
1.	ELECTRICAL SPECIFICATIONS	1~2
1-1.	FREQUENCY BAND	1
1-2.	IMPEDANCE	1
1-3.	MATCHING REQUIREMENTS	1
1-4.	VSWR	2, 5
2.	MECHANICAL SPECIFICATION	3, 4
2-1.	MECHANICAL CONFIGURATION	
3.	ENVIRONMENT CHARACTERISTICS	3
4.	PACKAGING	3
5.	APPENDIX	5~6

REVISION

REV. NO.	DATE	DESCRIPTION
A0	2022/09/28	APPROVAL

0. DEFINITIONS

dBi	Decibel relative isotropic antenna
Tx	Transmit frequency
Rx	Receive frequency
VSWR	Voltage Standing Wave Ratio
GSM	Global Service for Mobile communication
DCS	Digital Communication System
PCS	Personal Communication System
CDMA	Code Division Multiple Access
WCDMA	Wideband Code Division Multiple Access
PHS	Personal Handy-phone System
SAR	Specific Absorption Rate
PCB	Printed Circuit Board
TBD	To Be Defined
P	Parallel connection
S	Series connection

1. ELECTRICAL SPECIFICATIONS

1-1 FREQUENCY BAND

Freq. Band	Freq. (MHz)
WIFI	2400-2500MHz

1-2 IMPEDANCE

Nominal Impedance(including matching circuit) : **50** ohms

1-3 MATCHING REQUIREMENTS

The matching circuit on the PCB of the handset is according to Figure 1-3. Optimum matching circuit is highly dependent on the handset and thus.

Final matching circuit layout and values will be defined when handset is available

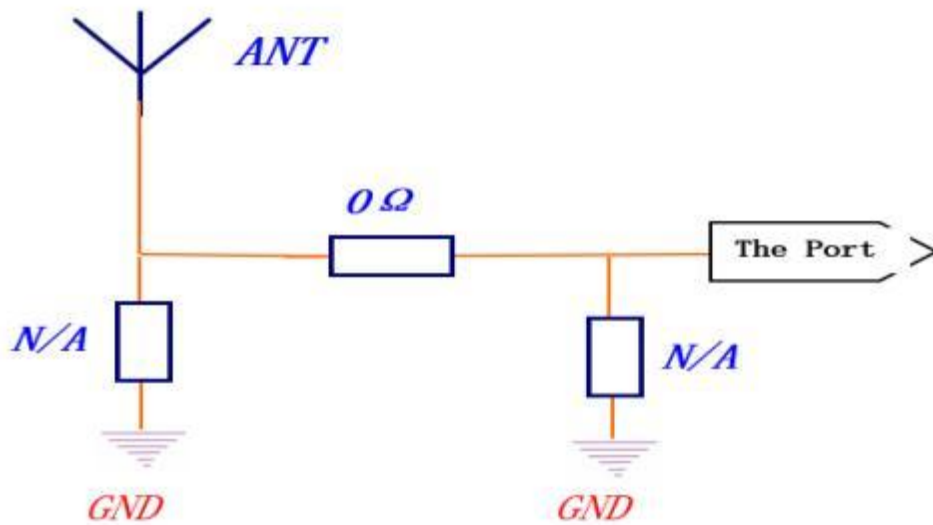


Figure 1-3

1-4 VSWR

FREE SPAC

Freq. Band	spec
2400-2500	<2

※Measuring a 50Ω test jig is connected to a network analyzer to measure the VSWR.

※※All test value is done in customer approval fixture.

2. MECHANICAL SPECIFICATIONS

2-1 MECHANICAL CONFIGURATION

The appearance of the antenna is according to Figure 2-1

3. ENVIRONMENTAL CHARACTERISTICS

NO.	ITEM	TEST CONDITION	SPECIFICATION
3-1	Low Temperature Test	1. Temperature: $-40 \pm 2^{\circ}\text{C}$ 2. Time: 48hrs	No material deformation is allowed.
3-2	High Temperature Test	1. Temperature: $+85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 2. Time: 48hrs	
3-3	High Temperature/Humidity Storage Test (non operating)	1. Temperature: $+60 \pm 2^{\circ}\text{C}$ 2. Humidity: $93\% \pm 2\% \text{RH}$ 3. Time: 48hrs	
3-4	Salt-Spray Test	35°C, 85%RH, 48Hours (According to MIL-STD-810E) The salt-spray is generated from a 5% salt (NaCl) solution.,	NO appear rusting phenomenon is allowed

4. PACKAGING

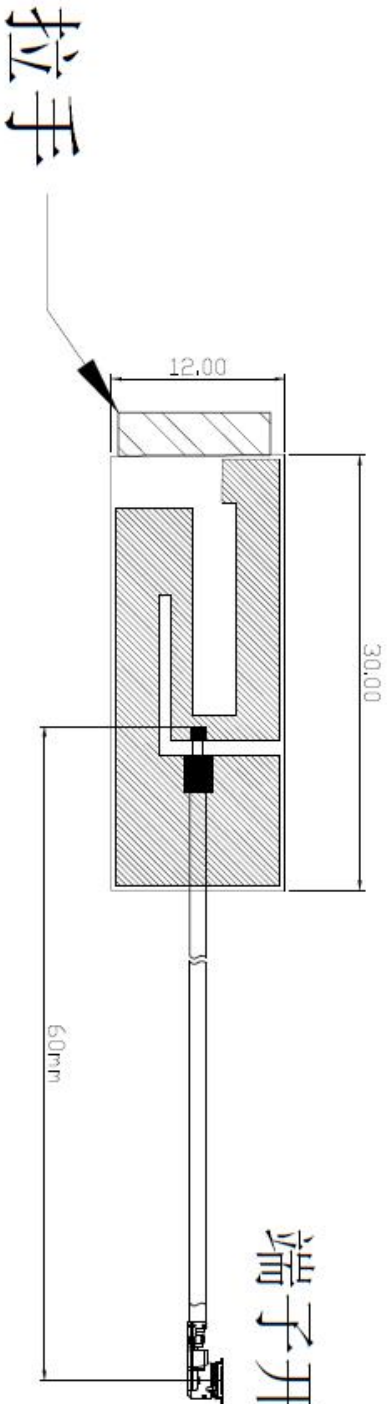
Antenna to be packed in a plastic bag. Each 100pcs per bag.

5. APPENDIX

All of the specifications are shown as the attached files.

CABLE ASSEMBLY

Rev	ECN NO.	DESCRIPTION
4	ECN220928-001	Initial



SPECIFICATION

1. Frequency Range: 2.4-2.5GHz
2. Impedance: 50Ω
3. 测试波形一致性
4. Polarization: Vertical
5. Radlation: Omni
6. Gain: 4.0dBi

NO	P/N	Description	Qty
③	GL-A01-0001	3M467: L31*W11*H10.15mm	1
②	PCA-0001-0013	PCB: L30*W13*H0.40mm	1
①	RC01113-CC0600B5	1.13黑色双锡线	1

TOLERANCES UNLESS OTHERWISE SPECIFIED
X, ±3 XXX /
.X ±1.00 X.^o /
.XX ±0.50 .X.^o /

天津应顺通信技术有限公司
 TIAN JIN YINSHUN COMMUNICATION TECHNOLOGY CO LTD.

SERIES: ANTENNA
 TITLE: Doorbell Antenna
 APPD: /
 PRT No.: ANT-P1-CE0600B5
 KOD: /
 DWG No.: D01-0000-4.013
 DR: Phil 2022/09/28

THESE DIMENSIONS AND SPECIFICATIONS ARE THE PROPERTY OF TIANJIN YINSHUN COMMUNICATION TECHNOLOGY CO.LTD. AND SHALL NOT BE REPRODUCED, COPIED OR USED IN ANY MANNER WITHOUT THE PRIOR WRITTEN CONSENT OF TIANJIN YINSHUN COMMUNICATION TECHNOLOGY CO.LTD.

UNITS	MATL	FINISH	SCALE	SHEET	REV.
MM	Δ	Δ	1:1	1/1	4

成品图

Customer No: 天津华来	File: 2022/9/28
Supplier NO:	Note: VSWR/RT/Smith Chart
Sample No:	
Test Condition: FREE SPACE	
Confirmation: JingQiang Hao	Engineer: GaoHe Sun



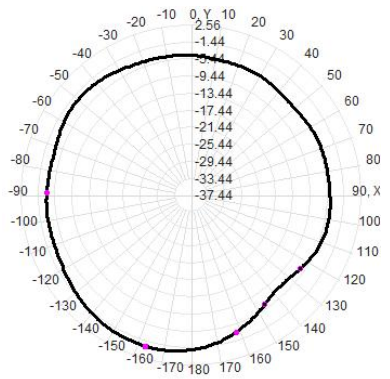
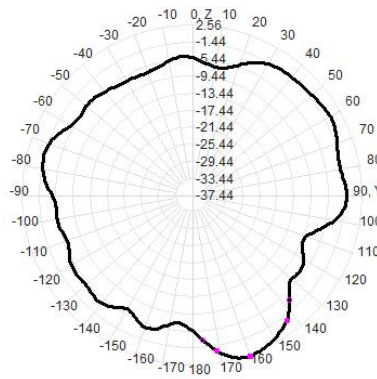
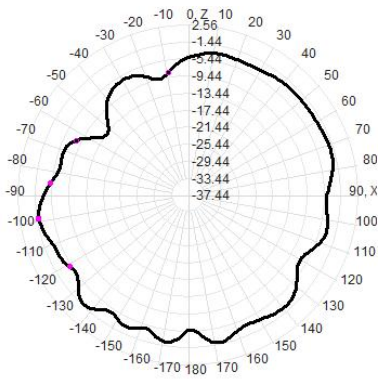
Antenna Test Data

一: Antenna Efficiency&PeakGain

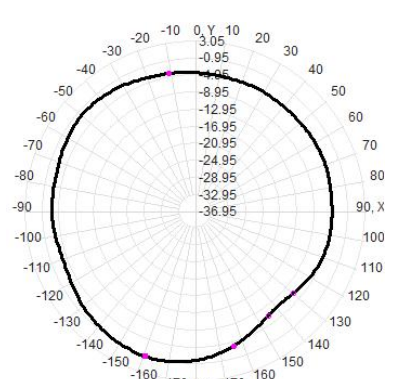
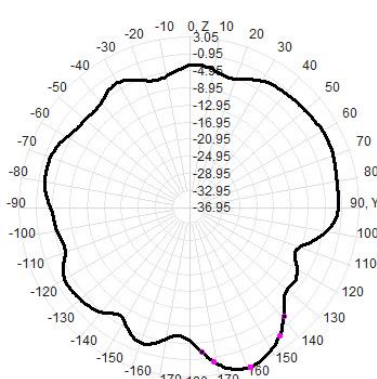
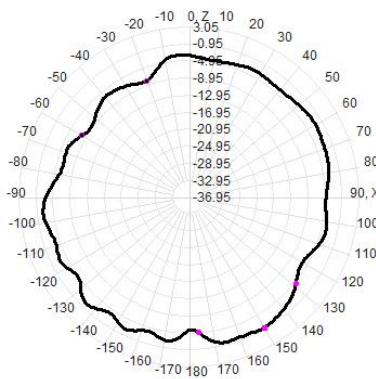
Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400.0	3.53	52.43
2410.0	3.66	52.74
2420.0	3.83	53.14
2430.0	3.93	52.99
2440.0	4.23	54.37
2450.0	4.26	53.49
2460.0	4.37	53.67
2470.0	4.38	53.63
2480.0	4.21	52.92
2490.0	3.74	50.88
2500.0	3.55	50.35

二: Antenna 2D—XZ/YZ/XY

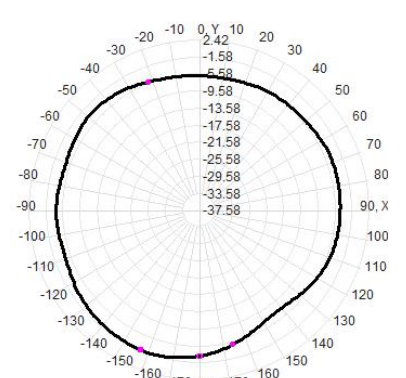
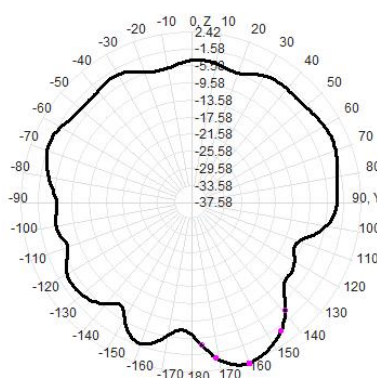
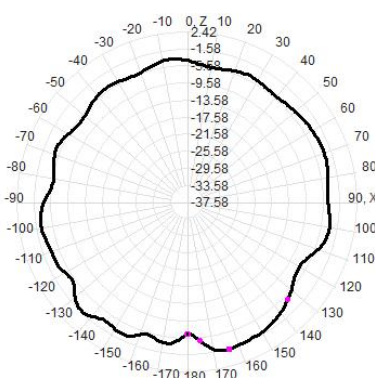
2400MHz



2450MHz



2500MHz



三: Antenna 3D (2400MHz/2450MHz/2500MHz)

