REVISIONS

REV	DESCRIPTION	ECO	DATE	APPROVED
A	Initial Release	0604	06/08/2009	F. Guan
B	Revision and Add production number SIN-GPSP2006	0611	06/08/2009	L.X. He

NO.:

DATE: 2009-06-08

GPS PASSIVE ANTENNA

SIN-GPSP2006

SPECIFICATION FOR APPROVAL

IT Base For Nova

上海联能科技有限公司

SINOCERAMICS,INC.

Antenna Division

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The purpose of this specification is to define GPS antenna series. The GPS antenna governed by this document are intended for use in devices for central office environments and shall be capable of meeting the reliability, quality, and performance intent of SIN-GPSP2006.This document can serve as a guideline for reliability assessment and the suppliers should target their design and processes to meet these reliability requirements in production.

GPS PASSIVE ANTENNA

1. SCOPE

This specification covers the GPS antenna designed for mobile phone and the antenna may use for mobile terminal, hand-held electronic products.

2. TYPE

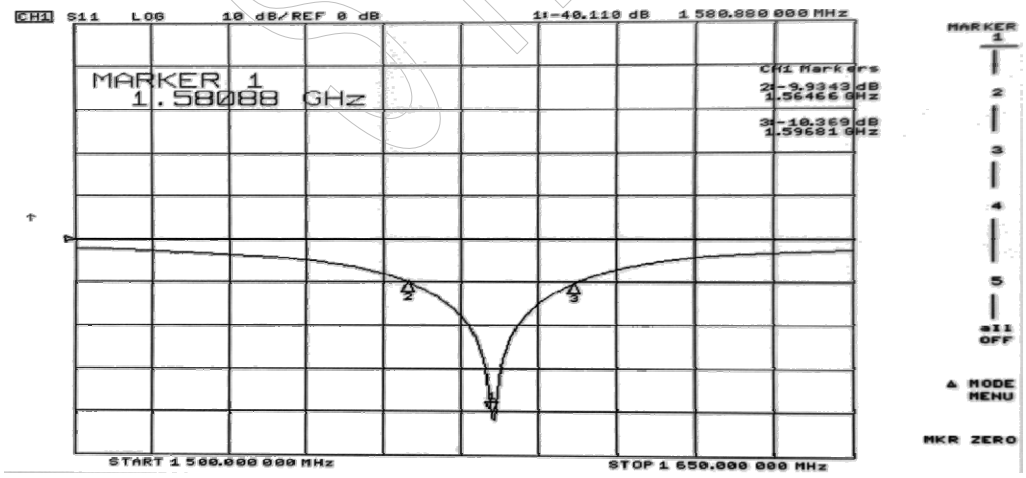
SIN-GPSP2006

3. SPECIFICATION FOR PASSIVE GPS ANTENNA TERMINAL

3.1 Performance Characteristics

ITEMS	CONTENT
Receiving frequency range	1575.42 MHz
Impedance	50 Ω
Standing wave ratio	VSWR < 2:1
Polarization model	RHCP
Gain (peak)	-0.5dB
Gain (AVE.)	-8.2dB
Radiation mode	Omni-directional

3.2 Standing wave



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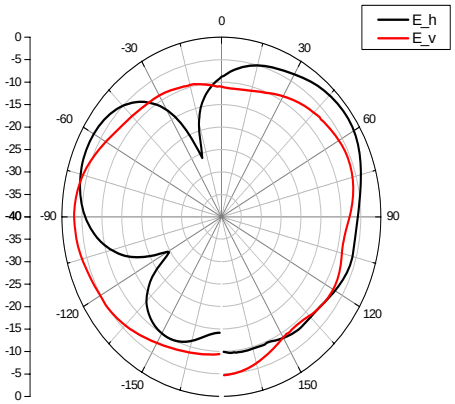
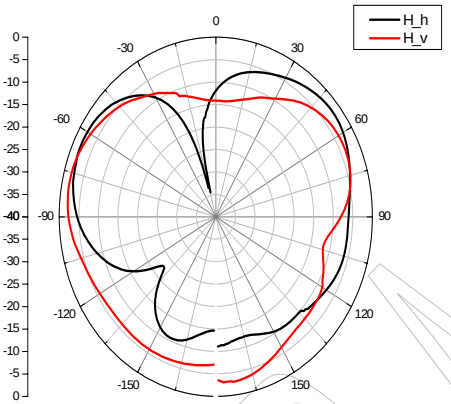
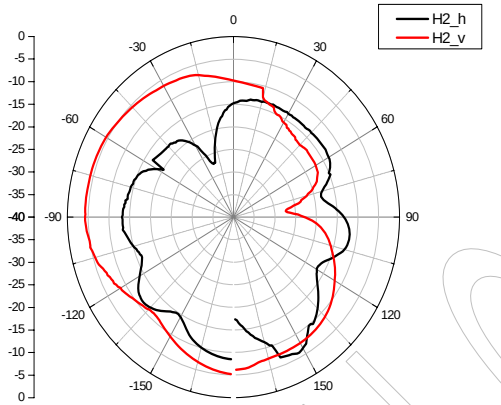
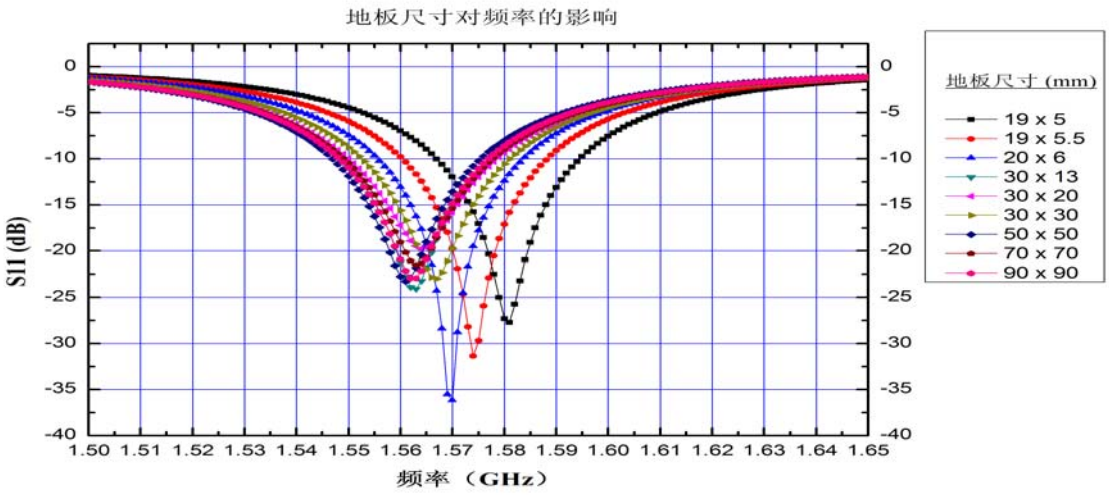
3.3 Radiation mode







3.4 The size of ground plane with the frequency.



Frequency

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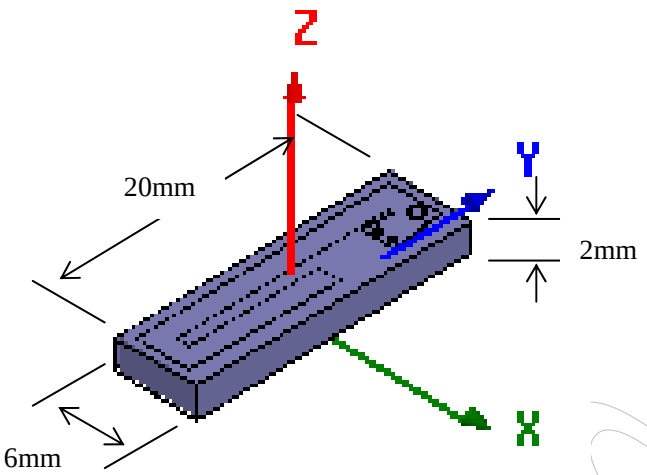
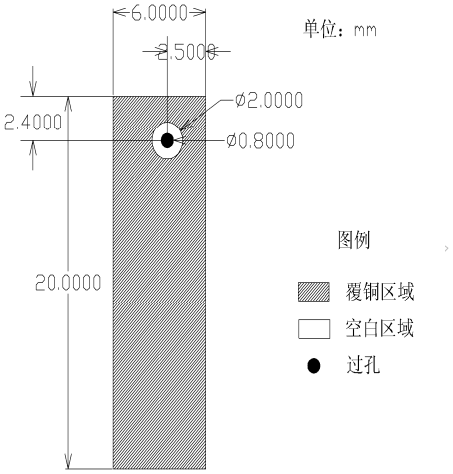
3.5 Dimensions

20 mm（L）x 6 mm（W） x 2 mm（H）

3.5.1 Fig





3.5.2. Outline drawing

No visible damage and dirt.

Except the pin, the antenna does not contain lead.

4. TEST AND RELIABILITY

4.1 Temperature:

25+/-3℃ ,and Relative humidity:65%+/-20% R.H.

Operating Temperature range: -40℃-+85℃.

Storage Temperature range: -40℃-+100℃

4.2 Moisture Proof

The specifications should satisfy the electrical characteristics specified in paragraph 3.1-3.4 after exposed to the temperature 40+/-2℃ and the relative humidity 90-95%RH for 96 hours and 1-2 hours recovery time under normal condition.

The specifications should satisfy the electrical characteristics specified in paragraph 3.1-3.4 after applied to the vibration of 10-55Hz with amplitude of 1.5mm for 2 hours each in X,Y and Z directions.

The specifications should satisfy the electrical characteristics specified in paragraph 3.1-3.4 after drapping onto the hard wooden board from the height of 30cm for 3 times each facet of the 3 dimensions of the device.

The specifications should satisfy the electrical characteristics specified in paragraph 3.1-3.4 after exposed to temperature 80+/-5℃ for 24+/-2 hours and 1-2 hours recovery time under normal temperature.

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The specifications should satisfy the electrical characteristics specified in paragraph 3.1-3.4after exposed to the temperature -40+/-5℃ for 24+/-2 hours and to 2 hours recovery time under normal temperature.

The specifications should satisfy the electrical characteristics specified in paragraph 3.1-3.4 after exposed to the low temperature -25℃ and high temperature +85℃ for 30+/-2 min each by 5 cycles and 1-2 hours recovery time under normal temperature.

The results of the reliability monitoring tests should be periodically updated to SINOCERA for review. Upon any failure, SINOCERA should be notified immediately and should conduct failure analysis, identify the root cause and implement the appropriate corrective actions.