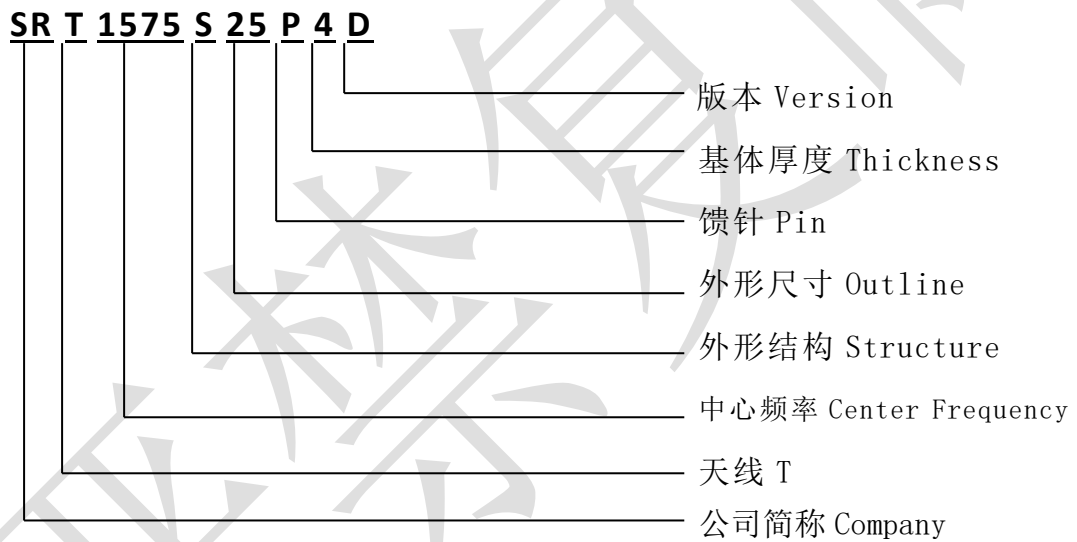


1. 概述 Introduction

这款产品是尺寸为 25X25X4MM GPS PATCH ANTENNA，具有高增益，小型化特点，适用于户外手持机，平板电子产品，定位器，跟踪器等领域。

This product is the size of 25X25X4MM GPS PATCH ANTENNA, with high gain, small features, suitable for outdoor handheld electronic products, locator tracker, etc..

2. 型号 Part No



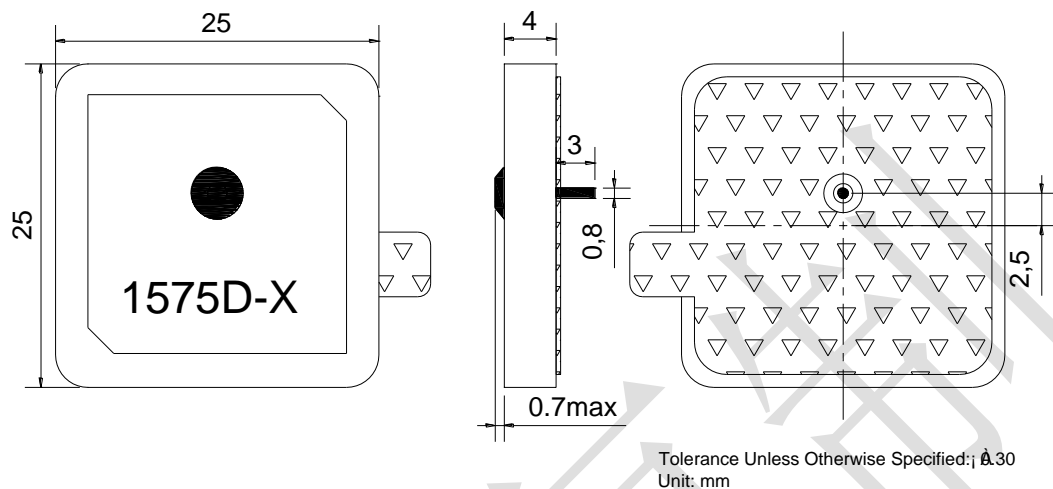
3. 成分和材料 Composition And Materials

NO	部件名 PART NAME	成分和材料 Composition & Materials
3.1	天线基片 antenna substrate	介电陶瓷 DIELECTRIC ALUMINA
3.2	馈针 pin	铜镀锡合金 Copper and tinned
3.3	电极 electrode	镀银 Ag Plated
3.4	地极 ground base	镀银 Ag Plated
3.5	双面胶 adhesive type	NITTO 5000 的胶

设计 Design:	确认 Check:	承认 Approval: Y.D JIN
料号 Part NO: SRT1575S25P4D	版本 Revision:	页码 Page: 1 / 8

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4. 外观和尺寸 Appearance And Dimentions:



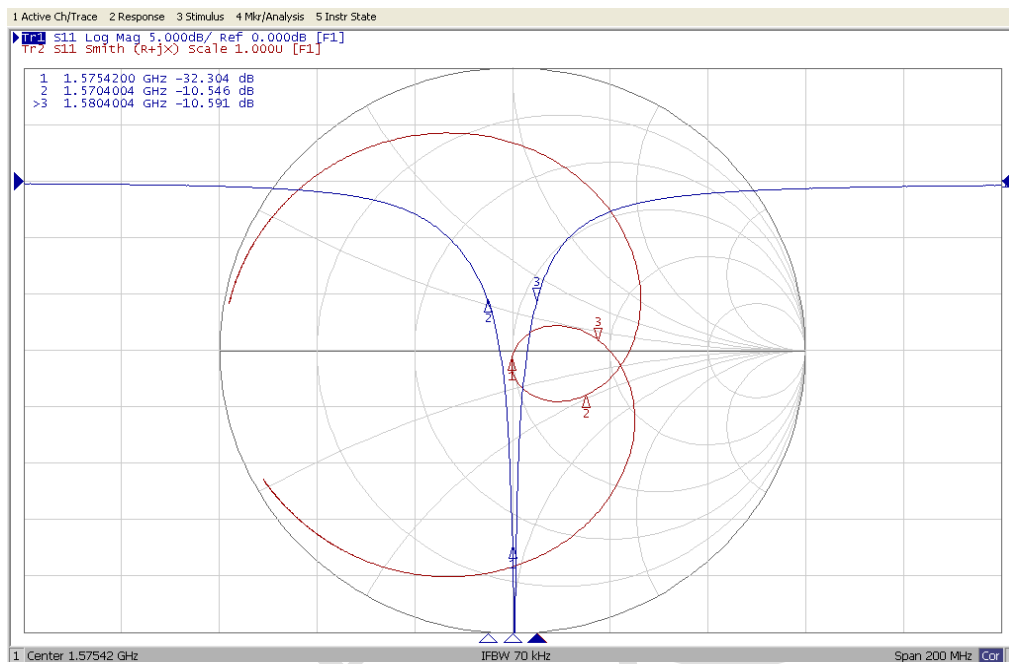
5. 电气性能 Electrical Characteristics

NO.	项目 ITEM	特性 Specifications
5.1	中心频率 Center Frequency (Mhz)	1575 ± 3
5.2	带宽 Band With (Mhz) (Return loss ≤ -10 dB)	≥ 8
5.3	驻波比 V. S. W. R (at Center Frequency)	≤ 1.5
5.4	增益 Gain(Zenith) (dBi typ)	2.0dB typical
5.5	轴比 Axial Ratio	3dB max
5.6	极化方式 Polarization	右旋极化 Right-Handed Circular
5.7	特性阻抗 Impedance (Ω)	50
5.8	测试基板 Test Board	27X27

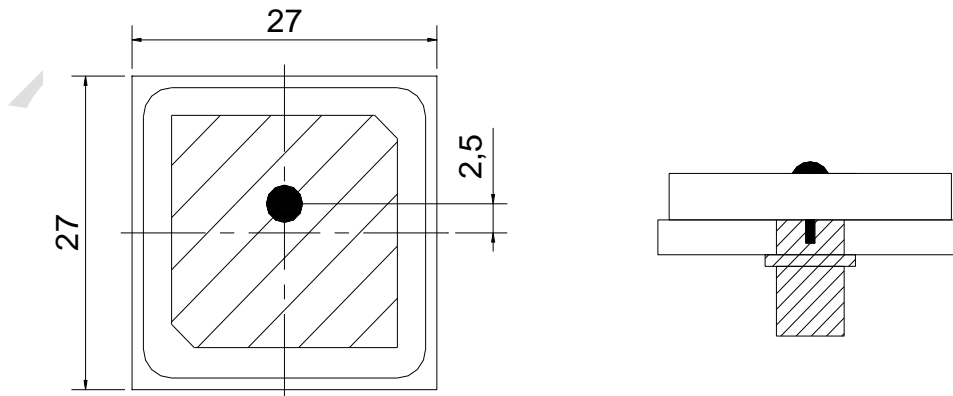
6. 特性曲线 Characteristic curve

设计 Design:	确认 Check:	承认 Approval: Y. D JIN
料号 Part NO: SRT1575S25P4D	版本 Revision:	页码 Page: 2 / 8
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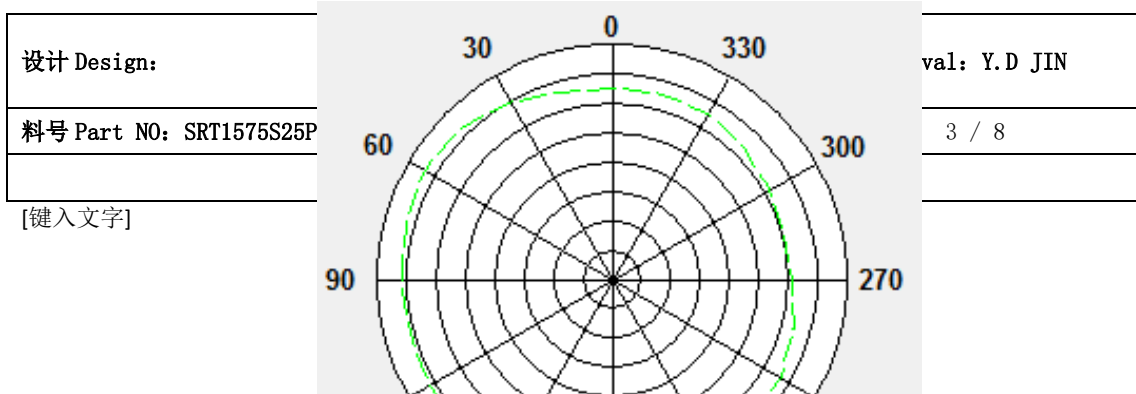
6.1 S11 curve



6.2 TEST FIXTURE

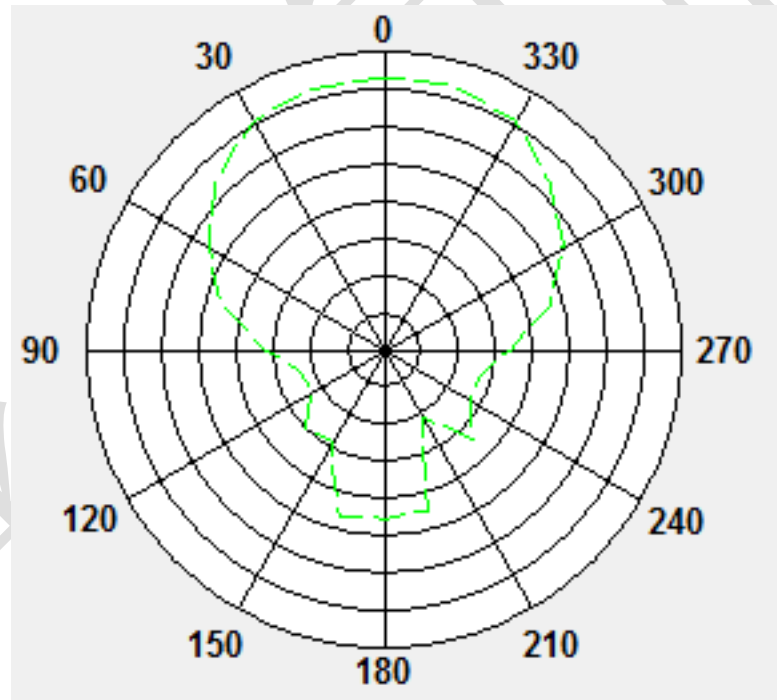


6.3 Far-field Power Distribution

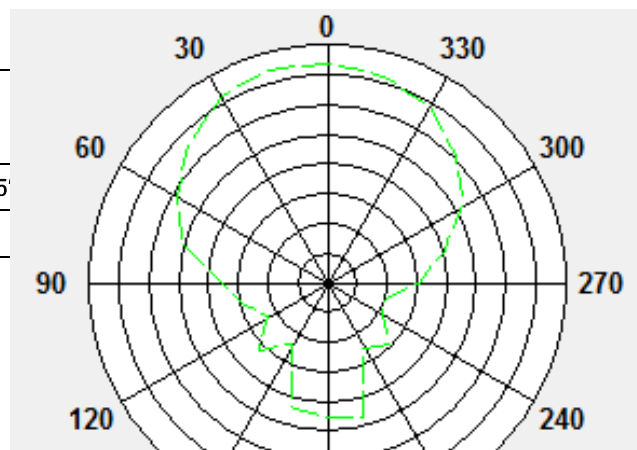


XY

XZ



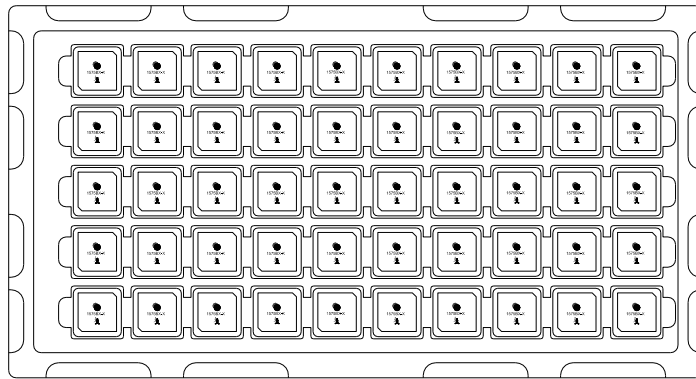
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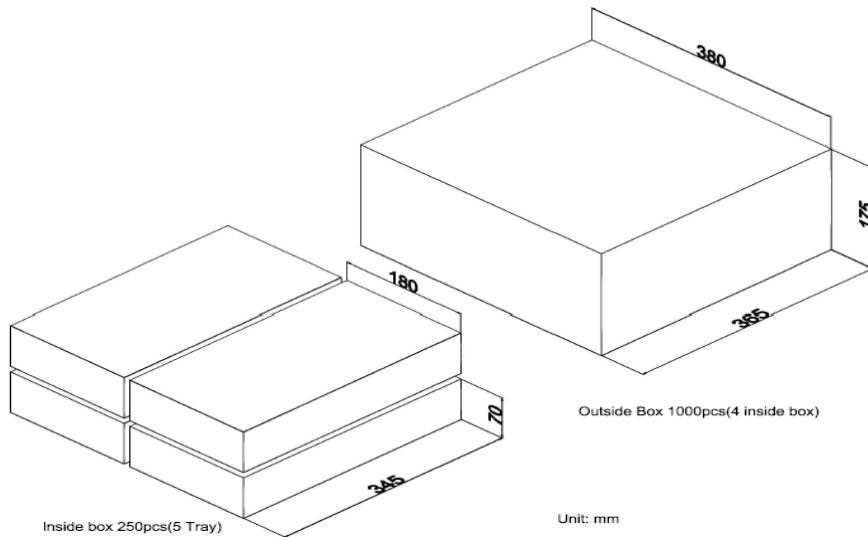
Approval: Y.D JIN
Page: 4 / 8

YZ

7. 包装 Packing



Tray 50pcs



8. 可靠性 Reliability: MTBF \geq 93710h

设计 Design:	确认 Check:	承认 Approval: Y.D JIN
料号 Part NO: SRT1575S25P4D	版本 Revision:	页码 Page: 5 / 8
[键入文字]		

试验条件:

温度 Temperature: 80°C

数量 Quantity: 20pcs

持续时间 Sustained Time: 240h

相对湿度 Relative Humidity: 85%

置信度 Reliability: 90%

9. 环境试验 Environmental specifications

9.1 耐湿热特性 Moisture Proof

在温度为 $40\pm 2^{\circ}\text{C}$ ，相对湿度90~95%的恒温湿箱中放置96 小时，在常温中恢复1~2 小时后测试，符合表5.1~5.4 规定。

The device should satisfy the electrical characteristics specified in paragraph 5.1~5.4 after exposed to the temperature $40\pm 2^{\circ}\text{C}$ and the relative humidity 90~95% RH for 96 hours and 1~2 hours recovery time under normal condition.

9.2 耐振动 Vibration Resist

在振动频率为 10~55Hz 振幅为1.5mm 沿X.Y.Z 方向各振动2 小时后测试符合表5.1~5.4 规定。

The device should satisfy the electrical characteristics specified in paragraph 5.1~5.4 after applied to the vibration of 10 to 55Hz with amplitude of 1.5mm for 2 hours each in X , Y and Z directions.

9.3 耐跌落冲击 Drop Shock

在 30cm 高度处按X, Y, Z 三个面分别自由跌落在木制地板上共3 次后测试符合表5.1~5.4规定。

The device should satisfy the electrical characteristics

设计 Design:	确认 Check:	承认 Approval: Y.D JIN
料号 Part NO: SRT1575S25P4D	版本 Revision:	页码 Page: 6 / 8
[键入文字]		

specified in paragraph 5.1~5.4 after dropping onto the hard wooden board from the height of 30cm for 3 times each facet of the 3 dimensions of the device.

9.4 高温特性 High Temperature Endurance

在温度为 $80\pm 5^{\circ}\text{C}$ 的恒温箱中放置 24 ± 2 小时，在常温中恢复1~2 小时后测试。符合表5.1~5.4 规定。

The device should satisfy the electrical characteristics specified in paragraph 5.1~5.4 after exposed to temperature $80\pm 5^{\circ}\text{C}$ for 24 ± 2 hours and 1~2 hours recovery time under normal temperature.

9.5 低温特性 Low Temperature Endurance

在温度为 $-40^{\circ}\text{C}\pm 5^{\circ}\text{C}$ 低温箱中放置 24 ± 2 小时后恢复1~2 小时测试符合表5.1~5.4 规定。

The device should also satisfy the electrical characteristics specified in paragraph 5.1~5.4 after exposed to the temperature $-40^{\circ}\text{C}\pm 5^{\circ}\text{C}$ for 24 ± 2 hours and to 2 hours recovery time under normal temperature.

10. 基本环境 The Basic Environment

温度范围 Temperature range $25\pm 3^{\circ}\text{C}$

相对湿度范围 Relative Humidity range 55~75RH

工作温度 Operating Temperature range $-40^{\circ}\text{C}\sim +85^{\circ}\text{C}$

贮藏温度 Storage Temperature range $-40^{\circ}\text{C}\sim +100^{\circ}\text{C}$

11. 注意事项 Note

设计 Design:	确认 Check:	承认 Approval: Y.D JIN
料号 Part NO: SRT1575S25P4D	版本 Revision:	页码 Page: 7 / 8
[键入文字]		

11.1 由于天线在不同的基板会表现出不同的特性，当我司产品被安装到贵司产品上时，请保证贵司的产品已根据贵司的规范进行了有效评价和确认

Because the antenna will show different characteristics in the different substrate, when our product is mounted to your product, please make sure that your product is according to your specifications evaluated and confirmed

11.2 如果贵司对我司产品的使用已超过了本测试规范所界定的产品功能，那么对于由此引发的失效，我司将不予保证。

We cannot warrant against failure caused by any use of our product that deviates from the intended use as described in this product specification.

11.3 对于正常使用过程中造成的失效，在出厂之日起三个月内给予免费维修；超过这个时限的维修我们将收取一定的材料成本和维修费用。 The product will get free warranty for three months since the date of purchase users operate in the correct way; users will have to pay cost of the materials and maintaining fee out of the condition.

11.4 电子敏感元器件，拿起时注意防静电。

Electrostatic sensitive device. Observe precautions for handling.

设计 Design:	确认 Check:	承认 Approval: Y.D JIN
料号 Part NO: SRT1575S25P4D	版本 Revision:	页码 Page: 8 / 8
[键入文字]		