



样 品 承 认 书

客户：

客户编号：

供 应 商：上海增信电子有限公司

产品型号：L1L2-36H325H4-70



产品描述：36*36*3.0mm, 25*25*4mm/NITTO 5000NS/PIN1.5mm/喷码“TAOGLAS
LOGO+GPSF.36.A”

备注：中性包装 400pcs/箱

客户签名：

客户盖章：

公司签名：

公司盖章：

注：确认后请回传该页！

制作：	日期：	地址	上海市徐汇区桂箐路 69 号 30 栋 605
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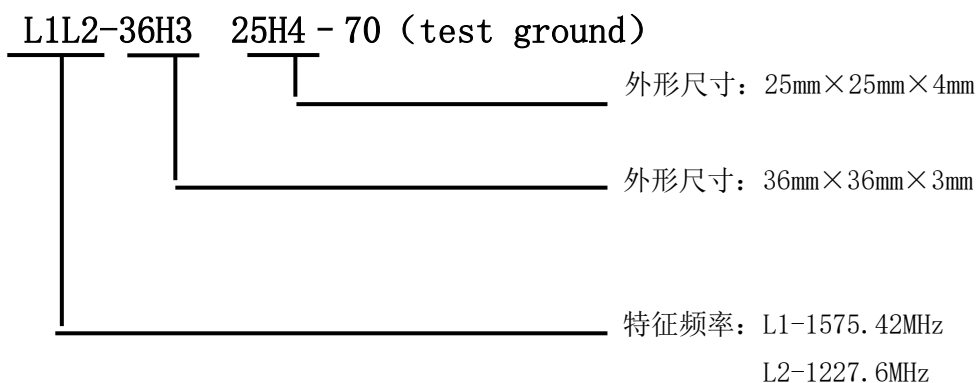
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1. 概述 INTRODUCTION

"佳利"微波介质天线系列产品用于 GPS 和局域网产品中，采用右旋圆极化设计，扁平状小型结构，具有低反射损耗、轴比小、增益高的特点。

"GLEAD" microwave dielectric antenna elements and its series are designed to be used for GPS and WLAN. The patch antenna with compact size incorporates a rectangular micro-strip design for GPS C/A right-hand circular polarization wave reception, featuring low RL, low Axial Ratio but high gain, etc.

2. 型号 Part Number



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3. 结构及材料 Structure and Material

表 1

No.	Description	名称	Structure and Material	结构及材料
4.1	Antenna Substrate	天线基片	Dielectric Constant 14 ± 0.5 & 20 ± 0.5 介电常数: 14 ± 0.5 & 20 ± 0.5	
4.2	Pin	引脚	Copper and tinplated	铜镀锡合金
4.3	Electrode	电极	Ag Plated	镀银
4.4	Ground Base	接地面	Ag Plated	镀银
4.5	Adhesive type	双面胶	NITTO 5000NS	

4. 外形尺寸 Dimension

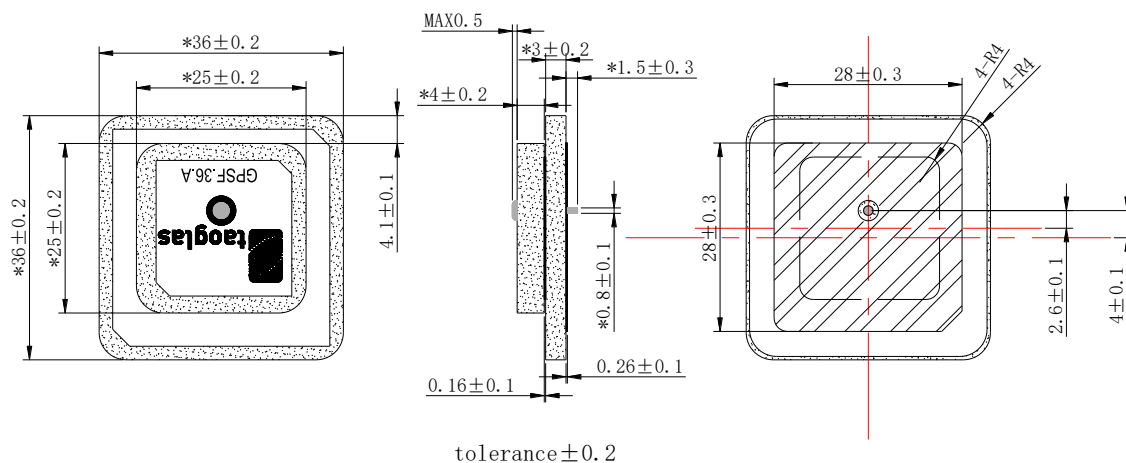


图 1 dimension

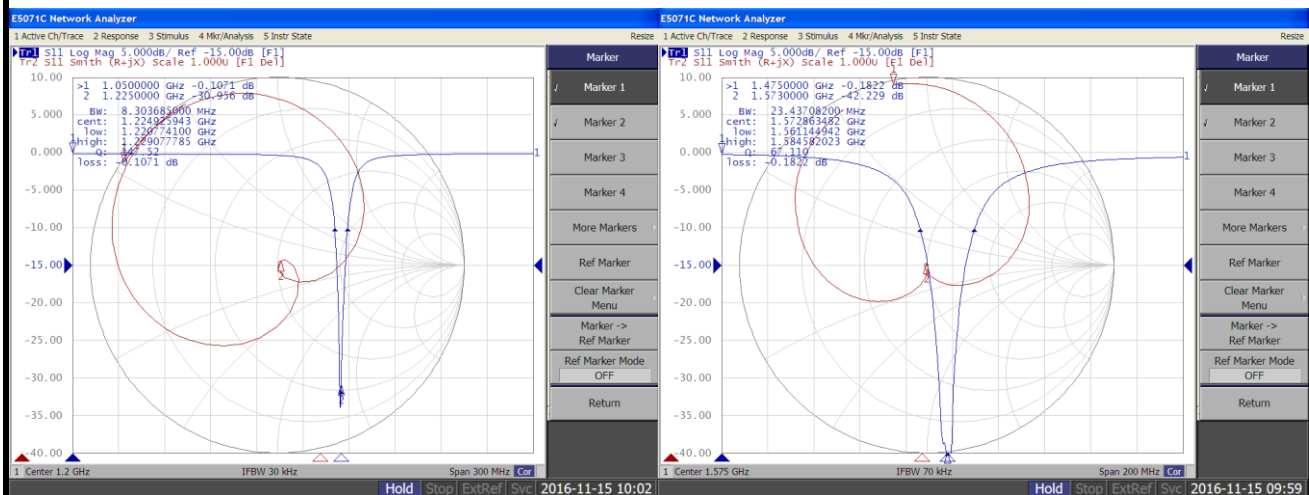
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5. 电气性能 Electrical Characteristics

表 2

No.	Item (项目)	Specifications (特性)	Post Environmental Tolerance (环境试验后允许误差)
5.1	接收频率范围 (MHz) Range of Receiving Frequency	L1: 1575.42 L2: 1227.6	±2.5
5.2	中心频率 Center Frequency (MHz) (with L1L2-70 GND Plane)	L1: 1573 L2: 1225	±3.0
5.3	带宽 Band With (MHz) (Return loss ≤-10dB)	≥12.0 (L1 频段) ≥4.0 (L2 频段)	——
5.4	驻波比 V.S.W.R(in Center Frequency)	≤1.5	——
5.5	增益 Gain(Zenith) (dBi typ)	2.0dB typical	——
5.6	轴比 Axial Ratio	5dB max	——
5.7	偏振方式 Polarization	右旋圆极化 Right-Handed Circular	——
5.8	特性阻抗 Im edance (Ω)	50	——
5.9	频率温度系数 (ppm/°C) Frequency Temperature Coefficient	0±10	——

6. 特性曲线 Characteristic curve



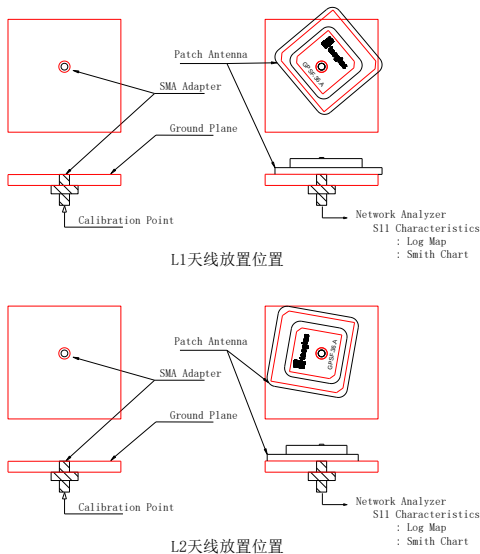
L2 频段波形

L1 频段波形

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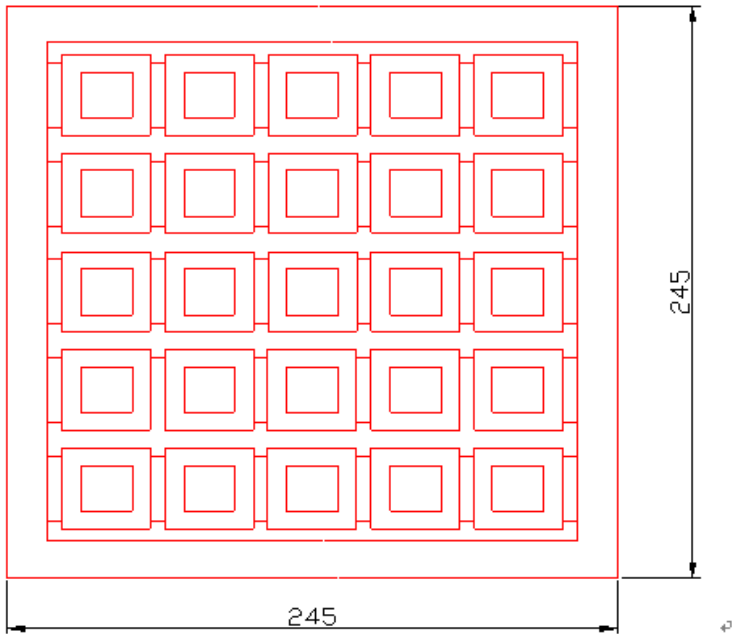
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7. 测试环境 Test environment

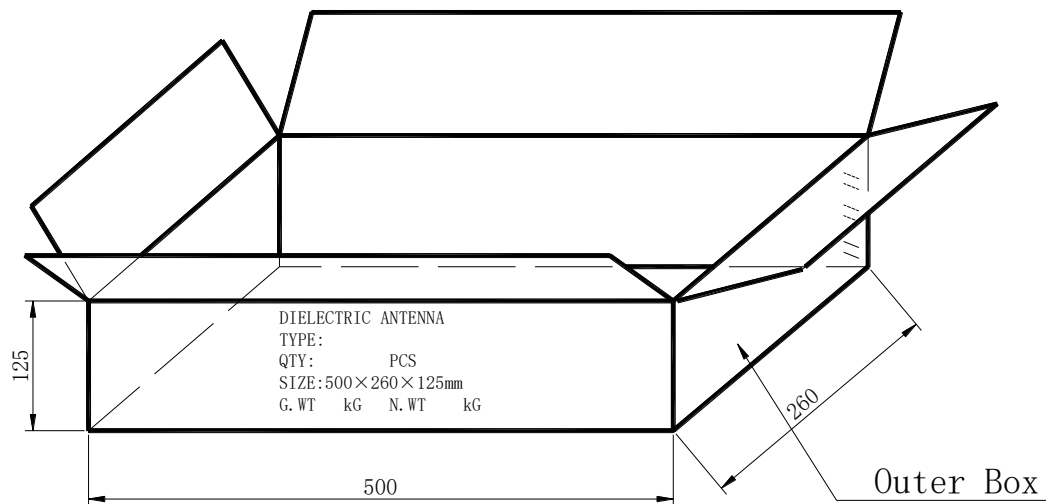
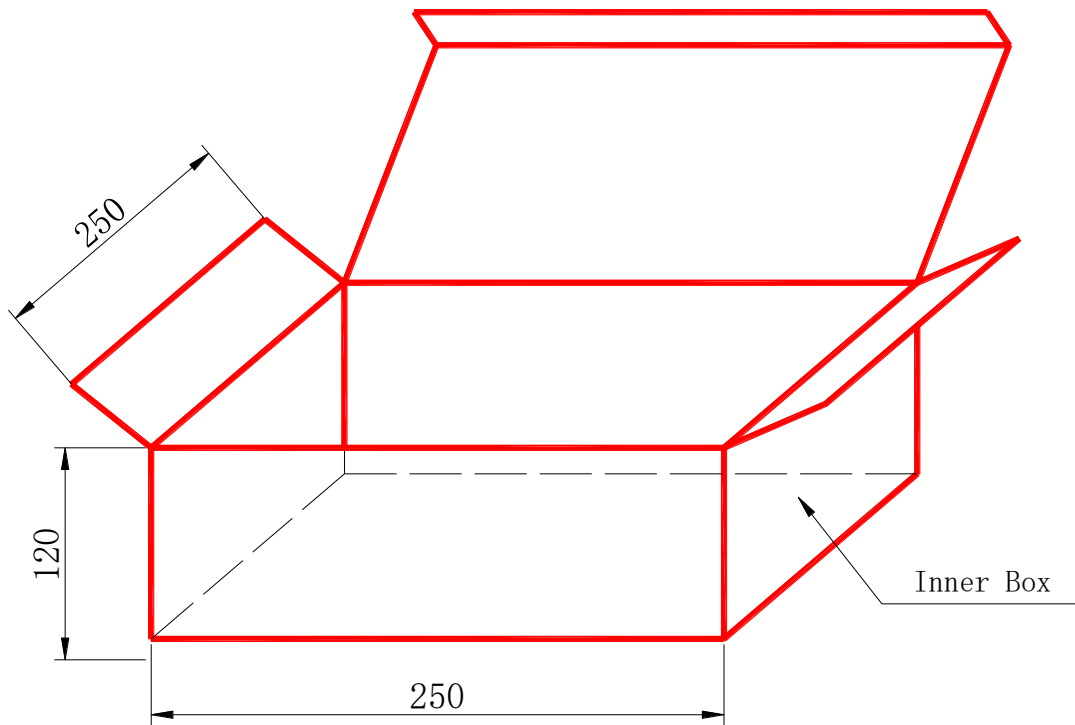


8. 包装 Package

包装名称	Package Name	包装数量	Quantity
吸塑盒	Tray	(25)	pcs/tray
内装盒	Inner Box	(200)	pcs/box
外包装箱	Outer Box	(400)	pcs/box



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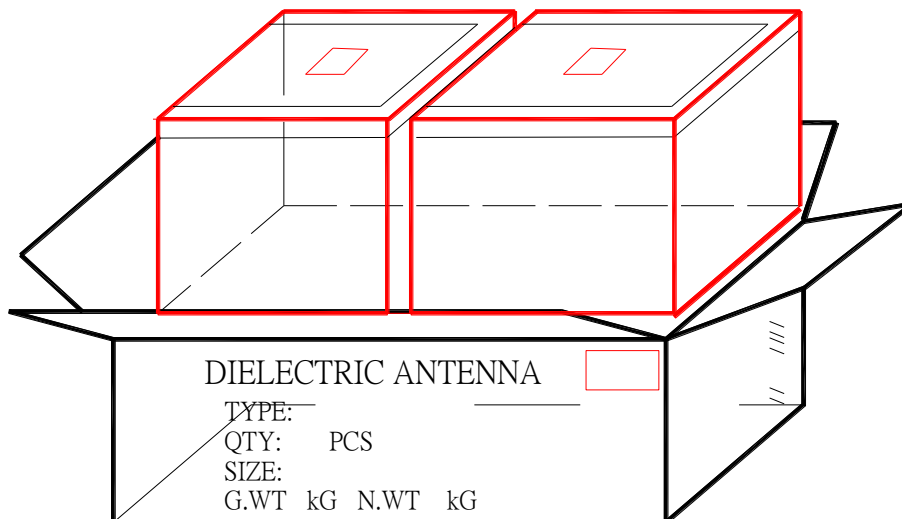
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9.环境试验 Environmental specifications

经环境试验后允许比起始读数偏差见表 2

Post Environmental Tolerance (Refer to the table 2)

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

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

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

贮藏温度 Storage Temperature range $-40^{\circ}\text{C} \sim +110^{\circ}\text{C}$

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 5.1~5.6 规定。

The device should satisfy the electrical characteristics specified in paragraph 5.1~5.6 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 5.1~5.6 规定。

The device should satisfy the electrical characteristics specified in paragraph 5.1~5.6 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 5.1~5.6 规定。

The device should satisfy the electrical characteristics specified in paragraph 5.1~5.6 after dropping onto the hard wooden board from the height of 30cm for 3 times each facet of the 3 dimensions of the device.

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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 5.1~5.6 规定。

The device should satisfy the electrical characteristics specified in paragraph 5.1~5.6 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

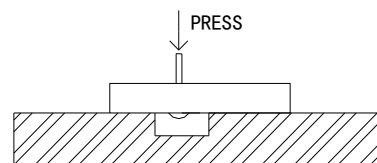
在温度为 $-40^\circ\text{C} \pm 5^\circ\text{C}$ 低温箱中放置 24 ± 2 小时后恢复 1~2 小时测试符合表 5.1~5.6 规定。

The device should also satisfy the electrical characteristics specified in paragraph 5.1~5.6 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.

9.6 焊锡结合力 Adhesion Strength of Soldering

用 2Kg 力在馈针轴向用力 10S，保证外观不损伤，满足 5.1~5.6 规定。

Force of 2kg is applied to each lead in axial direction for $10\text{s} \pm 1\text{s}$ (see drawing). No visible damage to the device should also satisfy the electrical characteristics specified in paragraph 5.1~5.6.



10. 注意事项 Note

1. 本承认书保证我司产品作为一个单体时的质量情况。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。

This product specification guarantees the quality of our product as a single unit. Please make sure that your product is evaluated and confirmed against your specifications when our product is mounted to your product.

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.

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.

4. 电子敏感元器件，拿起时注意防静电。

Electrostatic sensitive device. Observe precautions for handling.

5. 易氧化产品，产品拆包后请于 48 小时内用完或重新密封包装！

Oxidizable material, please repack within 48 hours by re-seal the package treatment after use them!