# 深圳市云顶通讯电子有限公司

TEL:+86 0755-23073599 FAX:+86 0755-23097189 Email:wht0809@163.com

# 承認書
# APPROVAL SHEET

| | |
|---|---|
| 客户：<br>: | 网娱视通 |
| 品名规格<br>DESCRIPTION: | **2DB 黑色-WiFi2.4/5G-1.13 黑-外露 L120MM** |
| 料号<br>PART NO.: | |
| 客户料号<br>CUS PART NO.: | 1139018000020 |
| 日期<br>D A T E: | 2020.4.22 |

云顶呈样签章

| 工程<br>ENGINEERING DEPARTMENT | 品保<br>Q C DEPARTMENT | 业务<br>SALES DEPARTMENT |
|---|---|---|
| 吴淑仪 | 刘丽 | 王洪涛 |

客户承认签章

| 工程<br>ENGINEERING DEPARTMENT | 品保<br>Q C DEPARTMENT | 采购<br>PURCHASING DEPARTMENT |
|---|---|---|
| | | |

联系电话：0755 23073599 15017941162

※ 承认书一式三份，惠蒙贵司承认签章

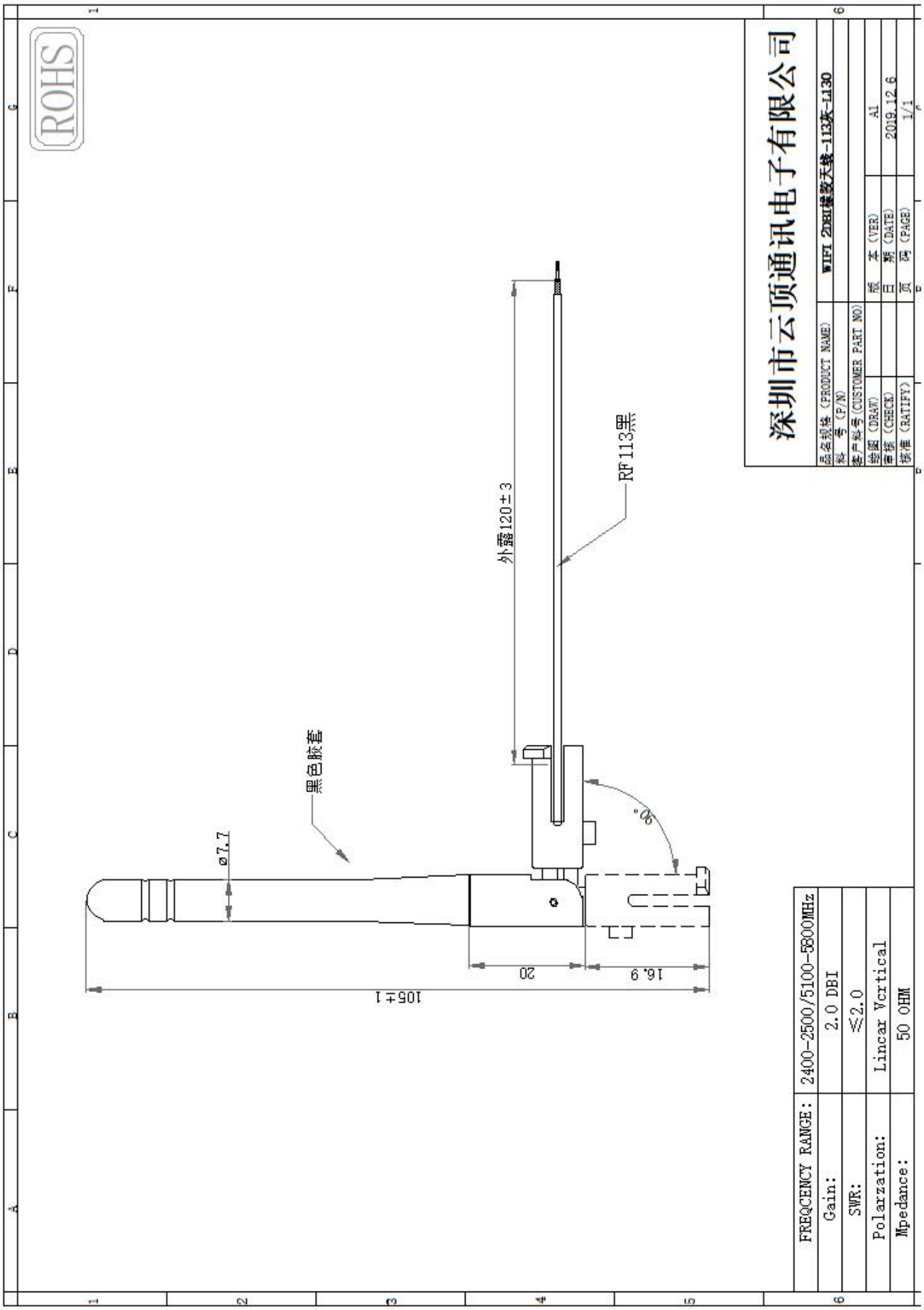
※ Admitted that book in triplicate, please signed by your company.

地址：深圳市宝安固戍地铁口文浩商务大厦 A 座 602

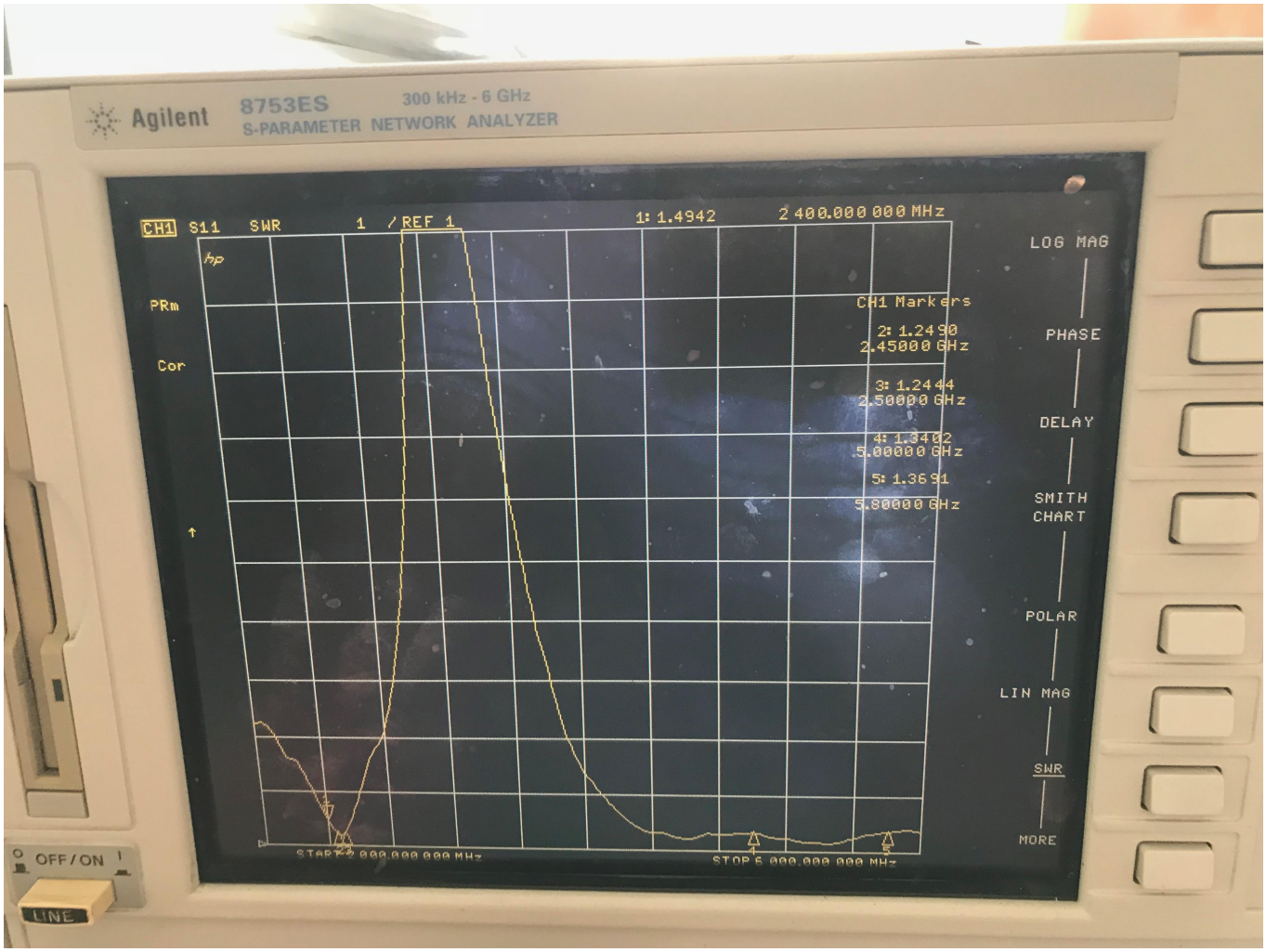
# 深圳市云顶通讯电子有限公司

TEL:+86 0755-23073599 FAX:+86 0755-23097189 Email:wht0809@163.com

## 1.天线结构图：

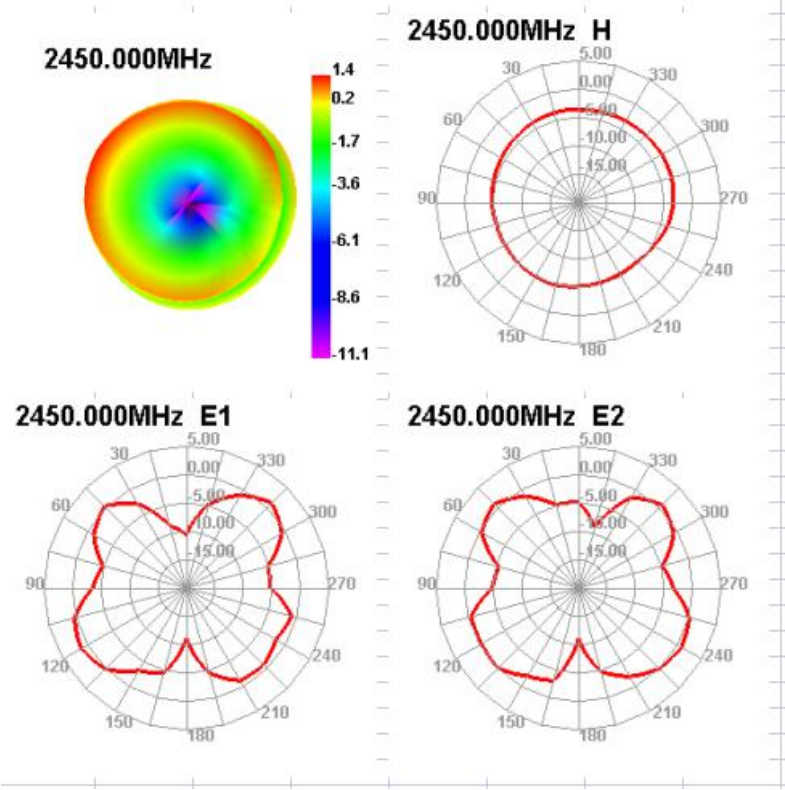


## 2.天线网络测试图：


Agilent
8753ES
300 kHz - 6 GHz
S-PARAMETER NETWORK ANALYZER
CH1 S11 SWR 1 / REF 1
1: 1.4942
2 400.000 000 MHz
PRm
Cor
CH1 Markers
2: 1.2490
2.45000 GHz
3: 1.2444
2.50000 GHz
4: 1.3402
5.00000 GHz
5: 1.3691
5.80000 GHz
LOG MAG
PHASE
DELAY
SMITH CHART
POLAR
LIN MAG
SWR
MORE
OFF/ON
LINE

3.OTA 暗室无源数据:

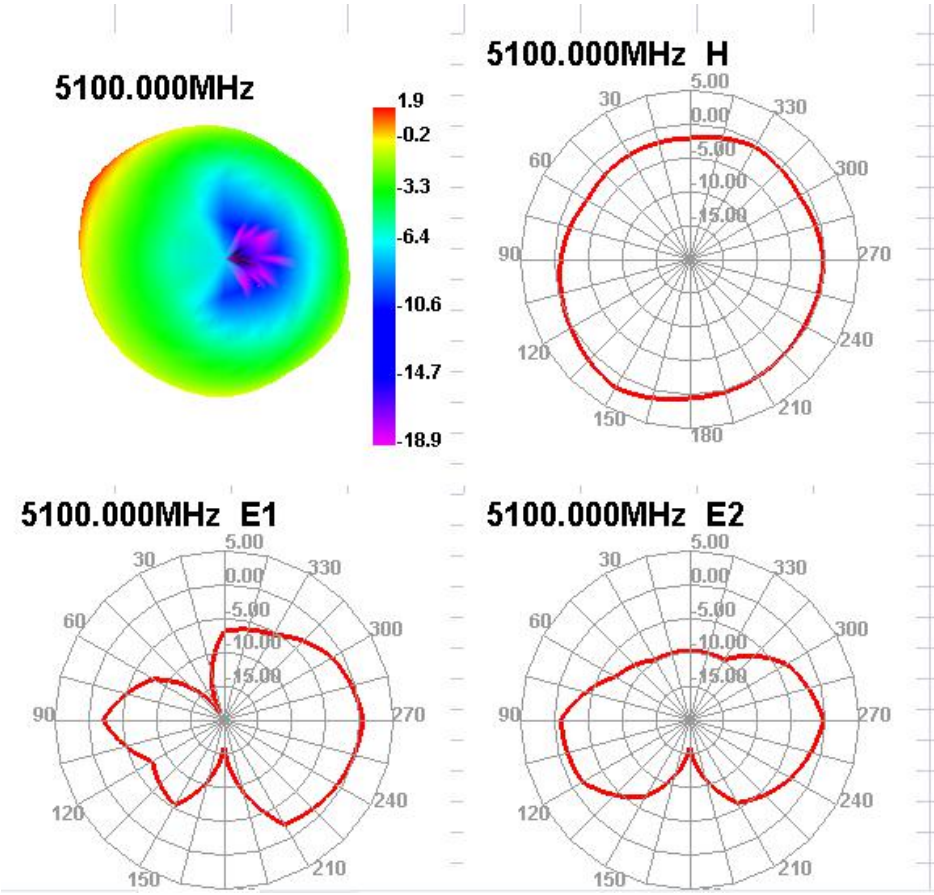
| Passive Test For WIFI | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Freq (MHz) | Effi (%) | Effi (dB) | Gain (dBi) | Gain (dBd) | Max (dB) | Min (dB) | Attenut Hor | Attenut Ver |
| 2400 | 49.22 | -3.08 | 1.3 | -0.85 | 1.3 | -17.14 | 48.09 | 47.94 |
| 2410 | 49.19 | -3.08 | 1.23 | -0.92 | 1.23 | -16.88 | 48.07 | 47.87 |
| 2420 | 48.97 | -3.1 | 1.12 | -1.03 | 1.12 | -16.27 | 48.18 | 48 |
| 2430 | 48 | -3.19 | 1 | -1.15 | 1 | -15.74 | 48.17 | 47.99 |
| 2440 | 49.81 | -3.03 | 1.21 | -0.94 | 1.21 | -15.97 | 48.33 | 48.11 |
| 2450 | 51.97 | -2.84 | 1.44 | -0.71 | 1.44 | -16.43 | 48.44 | 48.14 |
| 2460 | 51.39 | -2.89 | 1.4 | -0.75 | 1.4 | -17.57 | 48.41 | 48.06 |
| 2470 | 51.84 | -2.85 | 1.43 | -0.72 | 1.43 | -17.85 | 48.49 | 48.11 |
| 2480 | 52.99 | -2.76 | 1.48 | -0.67 | 1.48 | -17.28 | 48.63 | 48.18 |
| 2490 | 53.53 | -2.71 | 1.45 | -0.7 | 1.45 | -16.92 | 48.76 | 48.29 |
| 2500 | 50.61 | -2.96 | 1.1 | -1.05 | 1.1 | -17.94 | 48.69 | 48.16 |



# 深圳市云顶通讯电子有限公司

TEL:+86 0755-23073599 FAX:+86 0755-23097189 Email:wht0809@163.com

| Passive Test For WIFI5G | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Freq (MHz) | Effi (%) | Effi (dB) | Gain (dBi) | Gain (dBd) | UHIS (%) | DHIS (%) | Max (dB) | Min (dB) | Attenut Hor | Attenut Ver |
| 5100 | 51.31 | -2.9 | 1.88 | -0.27 | 22.733 | 28.581 | 1.88 | -18.89 | 57.95 | 57.06 |
| 5200 | 53.53 | -3.61 | 1.56 | -0.59 | 20.493 | 23.034 | 1.56 | -18.62 | 57.55 | 56.83 |
| 5300 | 48.73 | -4.12 | 1.15 | -2 | 17.671 | 21.06 | 1.15 | -16.29 | 57.16 | 56.32 |
| 5400 | 48.54 | -3.14 | 1.77 | -1.38 | 23.541 | 24.996 | 1.77 | -14.36 | 58.32 | 57.48 |
| 5500 | 54.59 | -3.13 | 2.2 | -0.95 | 25.558 | 23.028 | 2.2 | -17.86 | 58.91 | 57.66 |
| 5600 | 52 | -2.84 | 1.9 | -0.25 | 27.787 | 24.214 | 1.9 | -17.08 | 59.51 | 58.82 |
| 5700 | 63.68 | -2.7 | 2.25 | 0.1 | 30.373 | 23.306 | 2.25 | -19.7 | 60.54 | 59.93 |
| 5800 | 65.41 | -2.41 | 1.87 | -0.28 | 33.923 | 23.488 | 1.87 | -14.83 | 61.14 | 60.57 |




地址：深圳市宝安固戍地铁口文浩商务大厦 A 座 602

# 深圳市云顶通讯电子有限公司

TEL:+86 0755-23073599 FAX:+86 0755-23097189 Email:wht0809@163.com

## 电器技术参数

| 电 性 能 指 标 | | Electrical Specifications | |
|---|---|---|---|
| 频率范围 | 2400~2500/5100~5800MHz | Frequency Range | 2400~2500/5100~5800MHz |
| 电压驻波比 | ≤2.0 | VSWR | ≤2.0 |
| 增益 | 2 DBI | Gain | 2 DBI |
| 输入阻抗 | 50 Ω | Input Impedance | 50 Ω |
| 最大输入功率 | 50W | Maximum Input Power | 50W |
| **机 械 指 标** | | **Mechanical Specifications** | |
| 天线颜色 | 黑色 | Antenna Color | Black |
| 接口形式 | 环切 | Input connector | OPEN |
| 天线长度 | 120mm | Cable length | 120mm |
| 工作温度 | -40℃~+85℃ | Working Temperature | -40℃~+85℃ |
| 工作湿度 | 20~80% | Working Humidity | 20~80% |

地址：深圳市宝安固戍地铁口文浩商务大厦 A 座 602

# 深圳市云顶通讯电子有限公司

TEL:+86 0755-23073599 FAX:+86 0755-23097189 Email:wht0809@163.com

## 环境性能测试（Environment performance test）:

| 项目 | 测试条件 | 测试结果 |
|---|---|---|
| 储存环境 | 在没有指定的情况下测试温度、湿度、气压如下：<br>1. 温度为-30℃～+80℃<br>2.相对湿度为45%-85%<br>3.气压为86kpa-106kpa | 电气机械性能正常 |
| 高低温试验 | 在70℃与-40℃之间进行5次循环，然后在正常条件下1-2H，检查外观质量。 | 尺寸应满足规定并应满足<br>于机械、电气性能 |
| 耐恒定湿热试验 | 相对湿度95±3%，试验温度：40℃.持续2H作用后，试品取出后5min之内测定电气性能，试品在正常条件下1-2H，检查外观质量 | 尺寸应满足规定并应满足<br>于机械、电气性能 |
| 振动试验 | 振频范围10-55HZ，位移幅值：0.35MM，加速度幅值：50.0M/S，扫频循环次数：30次 | 电气机械性能正常 |
| 跌落试验 | 1M高空按照互相垂直的轴方向自由跌落3次 | 电气机械性能正常 |

| Project | Test condition | Test results |
|---|---|---|
| Storage environment | Test temperature, humidity, pressure without stated condition as follwings:1.Temperature: -30 ℃ ～+80 ℃ ;2.Relative humidity: 45%-85%;3,Pressure: 86kpa-106kpa | Electrical and mechanical performance normal |
| High and low temperature test | Having 5 times cycle between -40℃ to 70℃,Then in common condition 1-2 hours test exterior quality. | Measurement satisfied with electrical and mechanical performance normal. |
| Resistance constant hot and humid test | Relative humidity:95±3%,Test temperature: 40℃,last 2 hours ,put it after 5 min test the electrical function .Test products during common condition 1-2 hours ,Then test exterior quality. | Measurement satisfied with electrical and mechanical performance normal. |
| Vibration test | Vibrate Frequency:10-55HZ;<br>Distance :0.35mm;Acceleration :50.0m/s;Sweep frequency cycle:30 times | Electrical and mechanical performance normal |
| Fall test | From 1m height fall down 3 times freely (vertical direction) | Electrical and mechanical performance normal |

# 深圳市云顶通讯电子有限公司

TEL:+86 0755-23073599 FAX:+86 0755-23097189 Email:wht0809@163.com

## 主要技术特性（TECHNICALSPECIFICATIONS):

温度范围（Temprange): -55~+155℃

特性阻抗（Impedance): 50Ω

频率范围（Frequency Range): DC~12.4GHz

工作电压（Working Voltage): 335V max(有效值)

耐压（Withstand Voltage): 1000V rms(海平面最小值)

接触电阻（Contact resistance):

内导体之间（Center Contact) ≤3mΩ

外导体之间（Outer Contact) ≤2mΩ

绝缘电阻（Insulationresistance): ≥5000mΩ

电压驻波比（VSWR): 直式（Right angle) ≤1.10

耐用性（Durability): ≥500次

## 材料与涂覆（MATERIAL AND PLATING):

壳体（Shell): 黄铜（Brass) 镀硬金（Gold plated)

插针（Contact pin): 黄铜（Brass) 镀硬金（Gold plated)

插孔（Socket contact): 铍青铜（Brylliumbrass) 镀硬金（Gold plated)

绝缘体（Insulator): 聚四氟乙烯（PTFE)

O型密封件（O-ring sealing): 硅橡胶（6146 silastic)

塑胶件 （Plastic parts）: ABS

地址：深圳市宝安固戍地铁口文浩商务大厦 A 座 602

# 深圳市云顶通讯电子有限公司

TEL:+86 0755-23073599 FAX:+86 0755-23097189 Email:wht0809@163.com

## RF113 规格

1. 适用范围

本规格书制定了电线的结构和电气特性

1. Scope

This specification covers the construction and the electrical properties of wire.

同轴线

AWG 32

Coaxial Wire

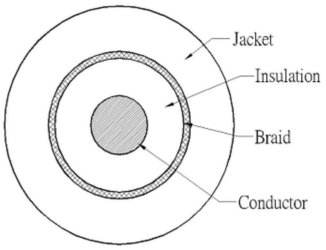
AWG 32

2. 结构/Construction

单位/Unit: mm

| 项目/Item | | 单位/Unit | 详细资料/Details |
|---|---|---|---|
| Conductor 导 体 | 材料/Material | - | 绞合镀银铜丝 Silver-coated copper wire |
| | 构成/Composition | (No./mm) | 7/0.08 |
| | 外径/OD. | mm | 0.24 |
| | 绞向/Orientation | - | S |
| Insulation 绝缘层 | 材料/Material | - | FEP(进口料) |
| | 绝缘颜色/Insulation color | - | 本色/Natural |
| | 标称绝缘厚度/ Nom. Thickness | mm | 0.22 |
| | 绝缘线径/OD. | mm | 0.69 |
| Braid Shield 编织 | 材料/Material | - | 镀锡铜丝 Tinned copper wire |
| | 构成/Composition | (No./mm) | 16/4/0.05 |
| | 编织密度/Coverage | (%) | >=90 |
| Jacket 外 被 | 材料/Material | - | FEP |
| | 标称绝缘厚度/ Nom. Thickness | mm | 0.12 |
| | 外径/OD. | mm | 1.13±0.10 |

3. Electrical Properties (at 20℃) /电气特性(20℃时)

| 项目/Item | 单位/Unit | 详细资料/Details |
|---|---|---|
| 导体电阻/Conductor Resistance | Ω/km | 571(Max.) |
| 绝缘电阻/Insulation Resistance | MΩ・km | 100(Min.) |
| 耐压强度(AC)/Dielectric Strength(AC) | V/ 1 Min | 500 |
| 特性阻抗/Impedance | Ω | 50±3 |
| 耐温等级/ Temperature | ℃ | 200 |
| 额定电压/rated voltage | V | 30 |

4. 电线截面图示如下: