深圳市艾特诺通讯设备有限公司

SHENZHEN ATN COMMUNICATION TECHNOLOGY CO.,LTD.

规格书

SPECIFICATION FOR APPROVL

编号：
MODEL NO　　ATN1608CHIP2440 天线

规格：
SPECIFICATIONS：　　1.6*0.8*0.8mm

日期：
DATE：　　2022.08.16

深圳市艾特诺通讯设备有限公司 A T N			客户 CUSTOMER		
制作 make	审核 examine	核准 Approver	结构 Structure	电子 Electronics	核准 Approver

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发行/变更记录

发行/变更日期	变更原因	变更内容	版本	备注
2022.08.16	新版发行	新版发行	A1.0	

一、测试设备 Test Equipment&Conditions

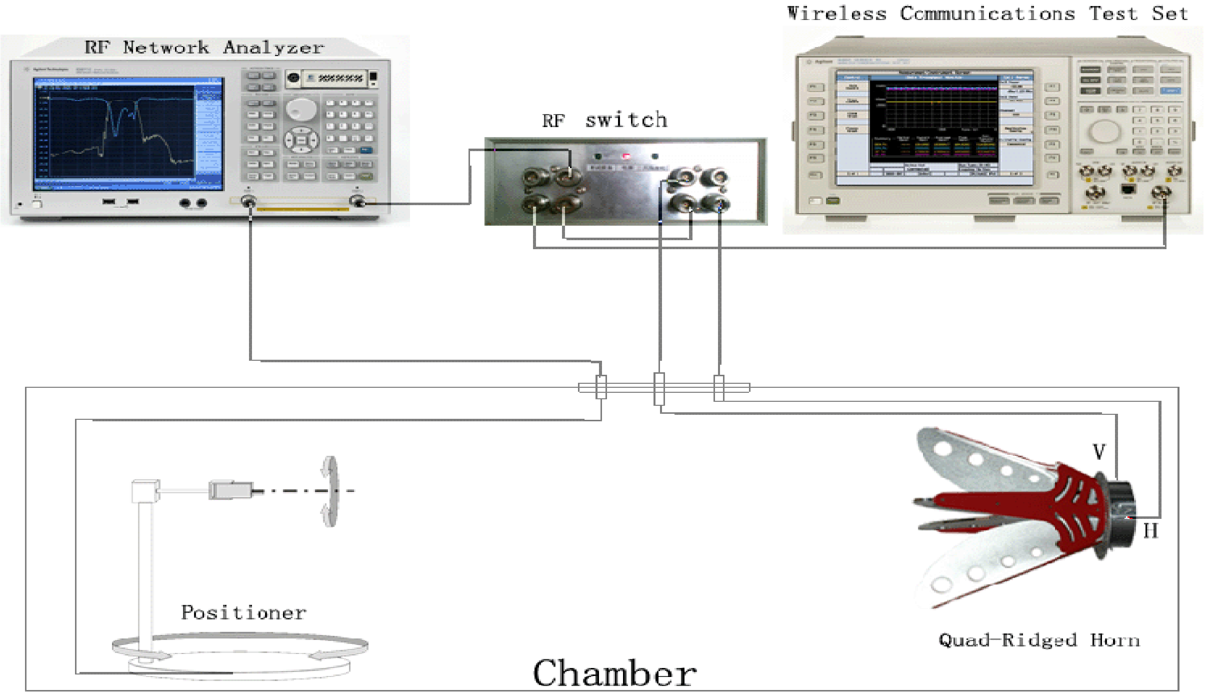
1.1 网络分析仪（Network Analyzers）

Agilent Technologies E5071B

1.2 综合测试仪（Communications Test Set）

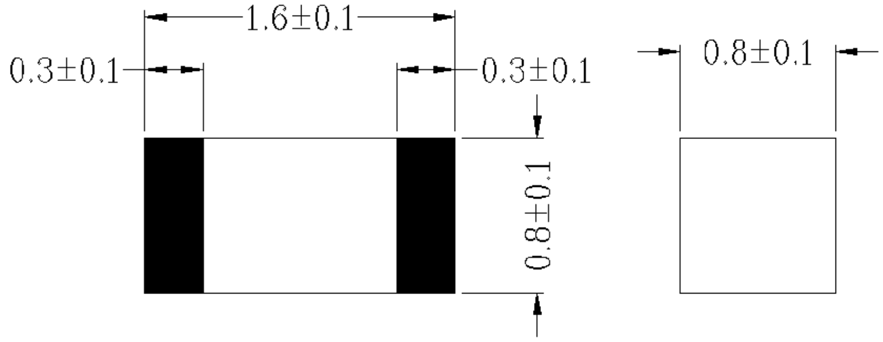
CMW500

1.3 3D 暗室测试系统（3D Chanber Test System）



二、产品规格 Product Specification

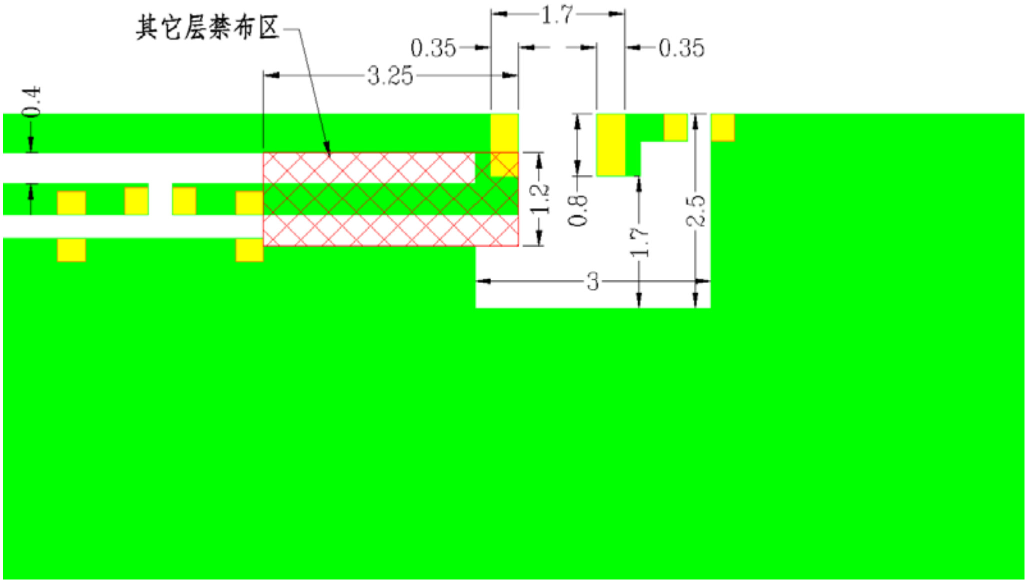
2.1、尺寸规格 Unit：mm



2.2、储存条件 Storage conditions

储存温度 Storage Temperature	5℃～40℃
相对湿度 relative humidity	20-70%
储存期限 Storage life	6 个月

三、设计要求 Design requirement

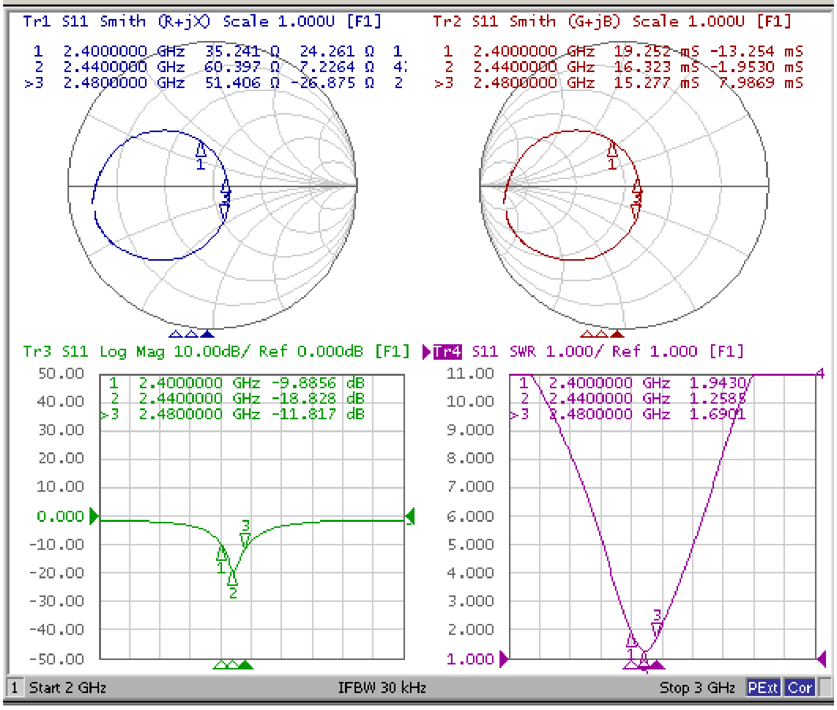


四、产品性能参数 Product performance parameters

Frequency	2400-2480MHz
VSRW	<2.0
Radiation efficiency	68%
Peak gain	3.21dBi
Polarization	Linear
Impedance	50Ω

五 、测试数据报告 Test Data Report

5.1 S11 Parameter

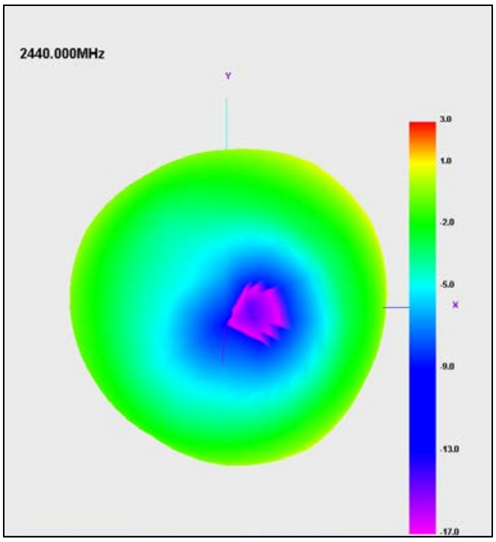


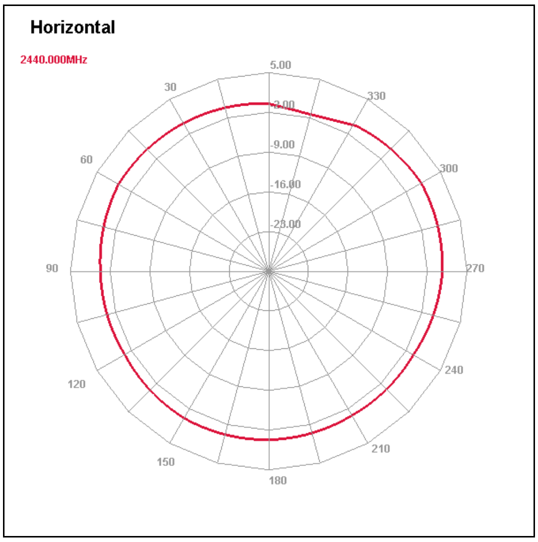
```
Tr1 S11 Smith (R+jX) Scale 1.000U [F1]
  1  2.4000000 GHz  35.241 Ω  24.261 Ω  1
  2  2.4400000 GHz  60.397 Ω  7.2264 Ω  4:
 >3  2.4800000 GHz  51.406 Ω -26.875 Ω  2

Tr2 S11 Smith (G+jB) Scale 1.000U [F1]
  1  2.4000000 GHz  19.252 mS -13.254 mS
  2  2.4400000 GHz  16.323 mS -1.9530 mS
 >3  2.4800000 GHz  15.277 mS  7.9869 mS

Tr3 S11 Log Mag 10.00dB/ Ref 0.000dB [F1]
  1  2.4000000 GHz  -9.8856 dB
  2  2.4400000 GHz  -18.828 dB
 >3  2.4800000 GHz  -11.817 dB

Tr4 S11 SWR 1.000/ Ref 1.000 [F1]
  1  2.4000000 GHz  1.9430
  2  2.4400000 GHz  1.2585
 >3  2.4800000 GHz  1.6901

1 Start 2 GHz          IFBW 30 kHz          Stop 3 GHz
```

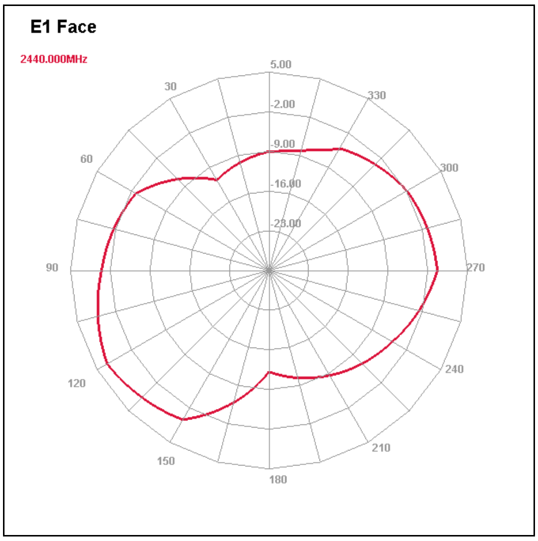
5.2 增益和效率　Gain & Efficiency

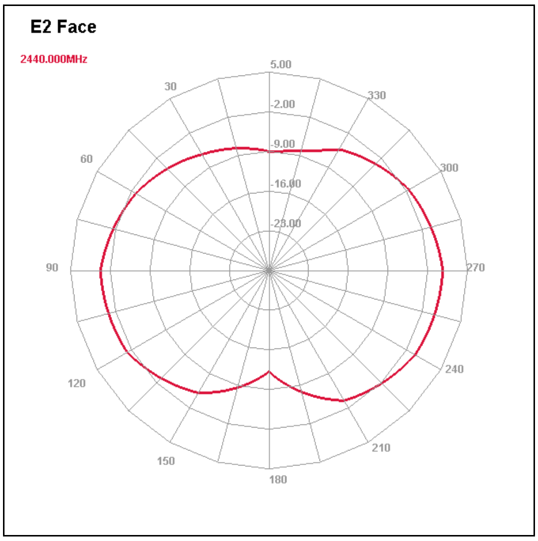
Freq(MHz)	Effi(%)	Effi(dB)	Gain dBi)
2400	66.92	-1.74	2.91
2410	69.87	-1.56	3.05
2420	68.35	-1.65	2.84
2430	72.35	-1.41	3.00
2440	71.47	-1.46	2.96
2450	74.2	-1.3	3.21
2460	70.94	-1.49	3.08
2470	65.84	-1.81	2.74
2480	59.56	-2.25	2.23

5.3　方向图　Radiation pattern



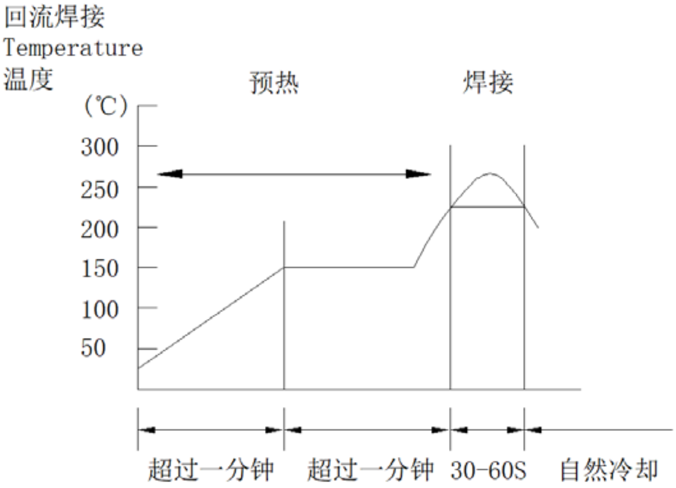






六、 推荐焊接温度曲线图 The temperature profile for soldering

6.1 回流焊接（Re-flow soldering ）

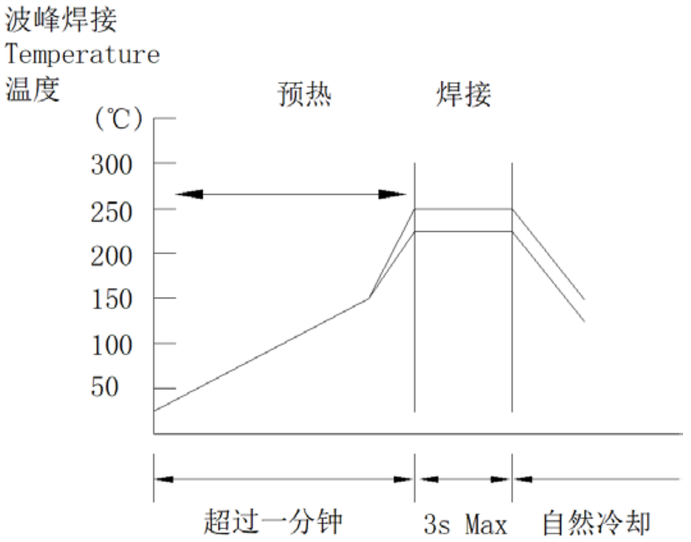


	Pb~Sn 焊接 Pb-Sn soldering	无铅焊接 Lead-free soldering
尖峰温度 Peak temperature	230℃~250℃	240℃~260℃

预热时，请将焊接温度与元件表面温度之间的温差维持在 T≤150℃。

While in preheating,please keep the temperature difference between soldering temperature and surface

6.2 波峰焊接（Wave soldering）

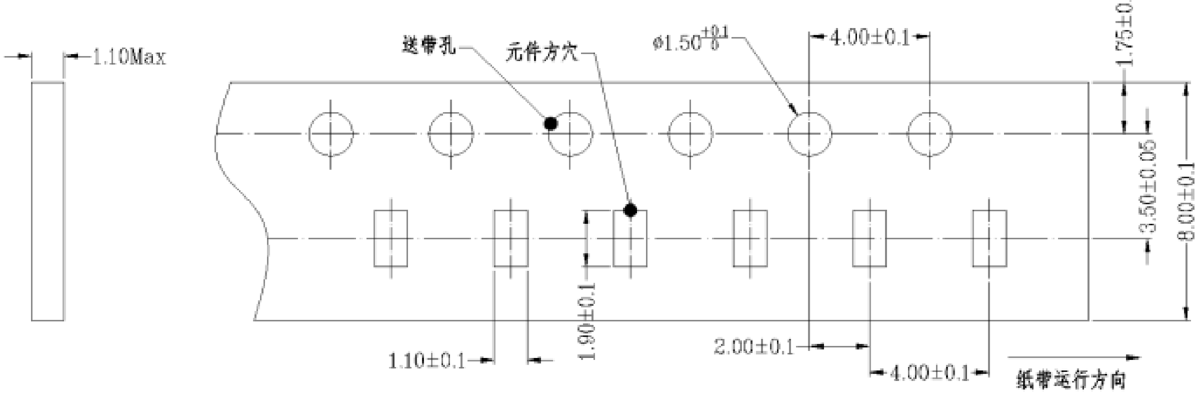


	Pb~Sn 焊接 Pb-Sn soldering	无铅焊接 Lead-free soldering
尖峰温度 Peak temperature	230℃~260℃	240℃~270℃

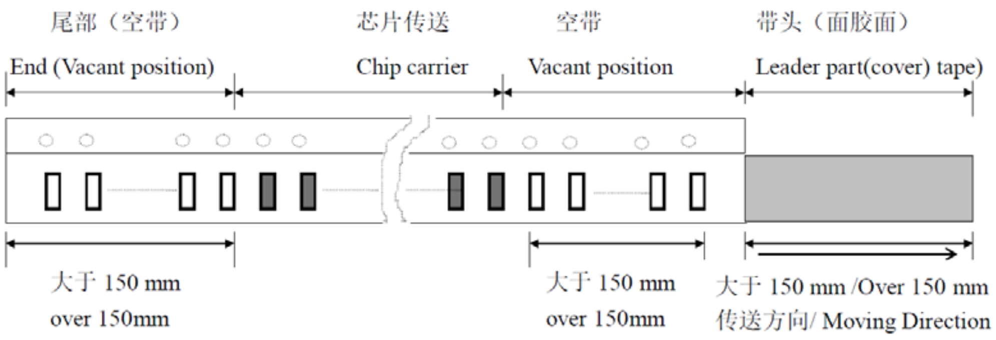
预热时，请将焊接温度与元件表面温度之间的温差维持在 T≤150℃。

While in preheating,please keep the temperature difference between soldering temperature and surface

七、 纸带编号尺寸大小 Dimensions of paper taping

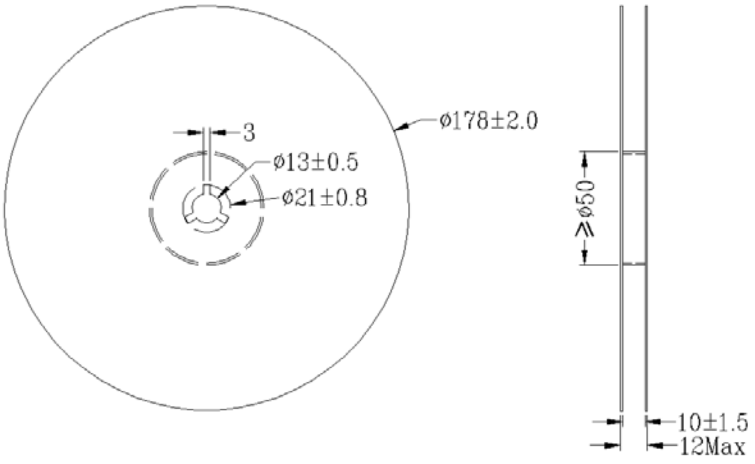


传送带的前后结构 Structure of leader part and end part of the carrier paper



八、产品包装 Product packaging

8.1 卷盘尺寸 Reel Dimensions (unit: mm)

	卷盘包装数量：4000 pcs/卷

8.2 纸箱包装

小包装数量：10 卷 The first package Quantity: 10 reels	大包装数量：6 盒 The second package Quantity: 6 cases