

Product specification

一. Antenna Outline

| | | |
|---------------------------|--------------------------|--|
| | Internal antenna | |
| 产品名称 Product Type | Internal antenna | |
| 型号 Model Type | XSZYRJNB6507-1.78-IPEX60 | |
| 长度 Length | 200 ± 1mm | |
| 最大直径 Max Diameter | φ7.0mm | |
| 最小直径 Min diameter | φ1.78 ± 0.5mm | |
| 接口 Connector | IPEX | |
| 雷电保护 Lightning protection | DC grounding | |
| 频率范围 Frequency Range | 915 ± 10MHz | |
| 输入阻抗 Impedance | 50Ω | |
| 驻波比 VSWR | 1.5MAX | |
| Temperature | -40℃ ~ +90℃ | |

70 ± 0.5

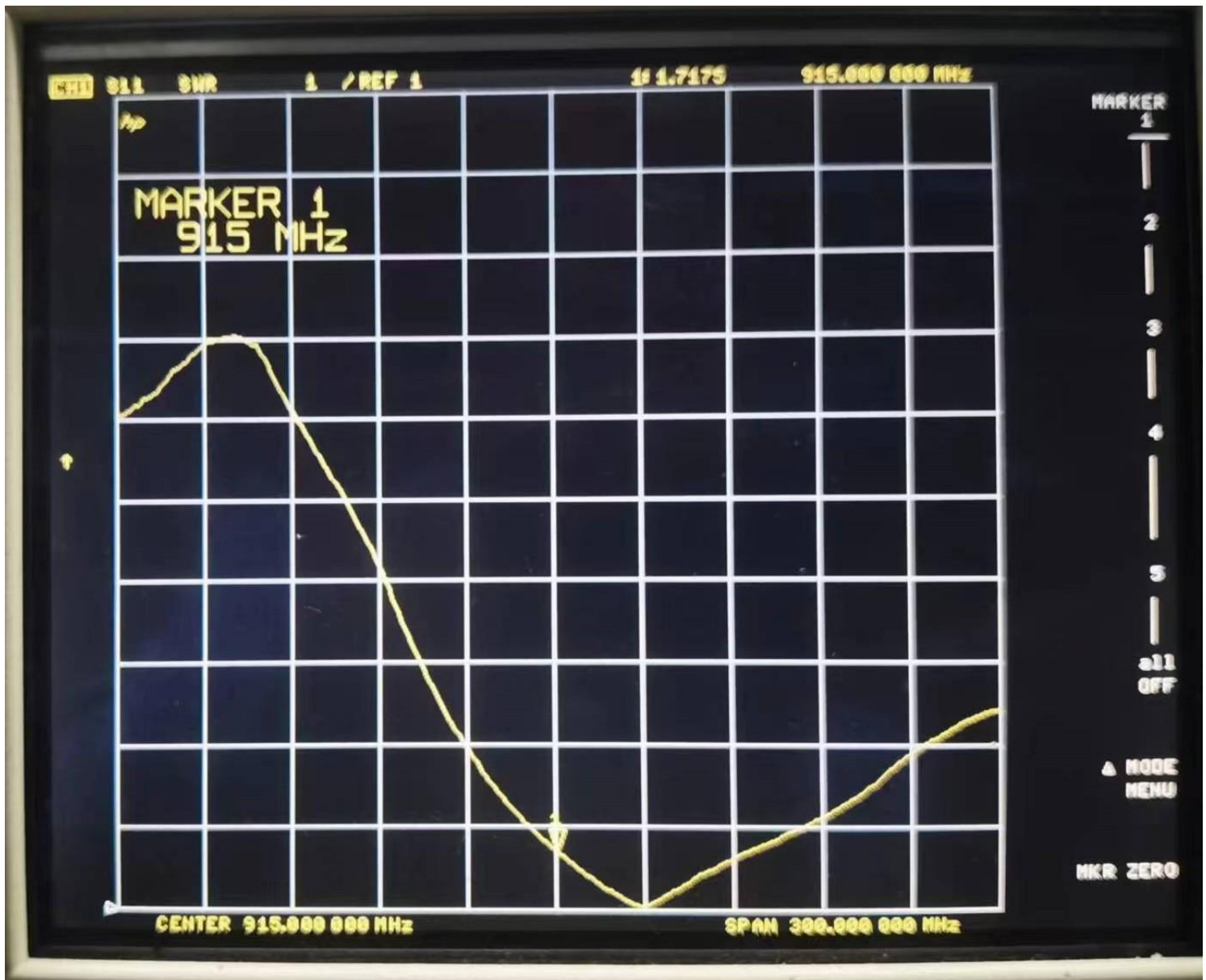
60 ± 0.5

The pulling force is not more than 8N

| | |
|--------|--------------------------|
| ① 接口 | RF1.78一代端子 |
| ② 同轴线 | RF1.78棕色同轴电缆200mm ± 0.05 |
| ③ 天线振子 | 黄铜φ7.0*70 |

| | | | | | | | |
|------|--------------------------|-------------|--|----------|-----|------|--|
| TYPE | 内置天线 | DRAWING NO. | | DESIGNER | 邓开元 | DATE | |
| 物料号 | XSZYRJNB6507-1.78-IPEX60 | 图号 | | 审核 | | 日期 | |
| 零件号 | JS | 数量 | | 设计 | | | |
| 规格 | 20240329 | 重量 | | | | | |
| 备注 | | 检验批 | | | | | |

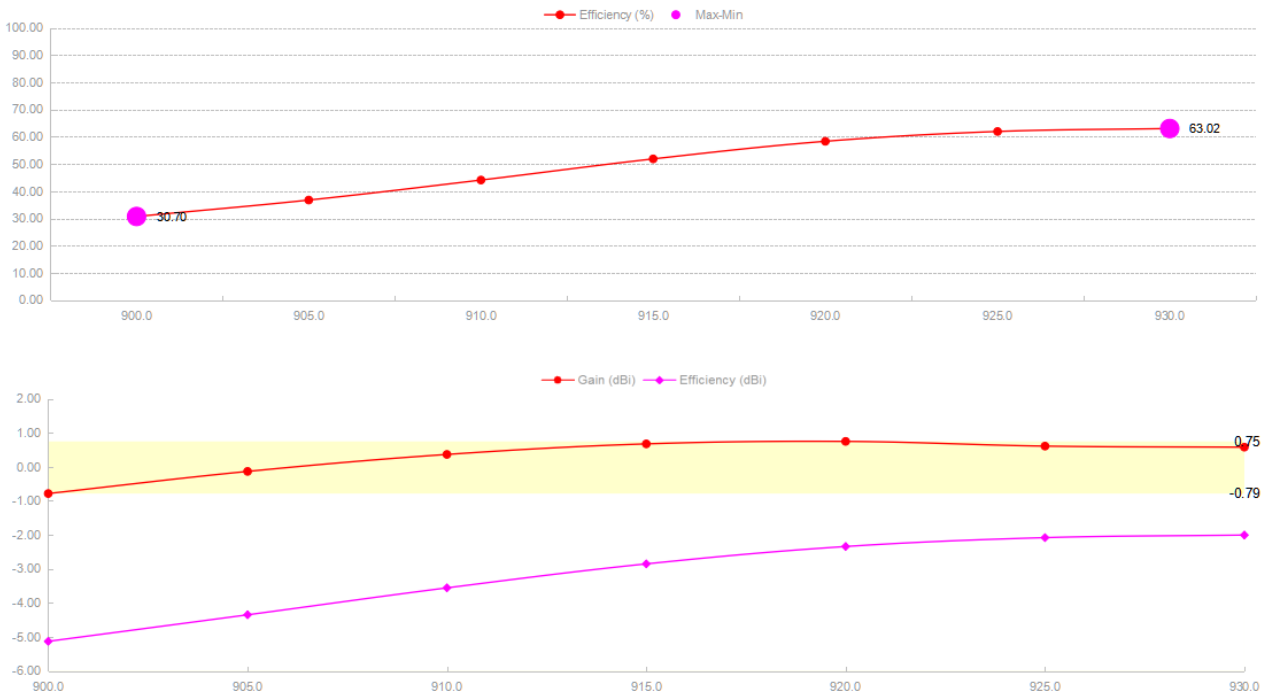
二. Antenna VSWR Diagram



三. Passive Test Data Gain Efficiency

| Frequency ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------------------------|--------|--------|--------|--------|--------|--------|--------|
| Frequency (MHz) | 900.0 | 905.0 | 910.0 | 915.0 | 920.0 | 925.0 | 930.0 |
| Efficiency (dBi) | -5.13 | -4.35 | -3.56 | -2.85 | -2.34 | -2.08 | -2.01 |
| Gain (dBi) | -4.78 | -3.84 | -3.16 | -2.45 | -2.08 | -2.21 | -2.32 |
| Efficiency (%) | 30.70 | 36.73 | 44.08 | 51.85 | 58.32 | 61.93 | 63.02 |
| Directivity (dB) | 4.34 | 4.21 | 3.92 | 3.53 | 3.09 | 2.69 | 2.58 |
| Peak Gain Position (Theta) | 104.00 | 104.00 | 104.00 | 104.00 | 104.00 | 105.00 | 104.00 |
| Peak Gain Position (Phi) | 259.00 | 258.00 | 256.00 | 253.00 | 249.00 | 207.00 | 191.00 |
| Efficiency ThetaPol (%) | 29.75 | 35.73 | 42.94 | 50.48 | 56.69 | 60.12 | 61.14 |
| Efficiency PhiPol (%) | 0.94 | 1.00 | 1.14 | 1.37 | 1.63 | 1.81 | 1.87 |
| Upper Hem. Efficiency (%) | 13.13 | 15.26 | 18.32 | 22.14 | 25.65 | 27.77 | 28.55 |
| Lower Hem. Efficiency (%) | 17.57 | 21.47 | 25.76 | 29.71 | 32.67 | 34.15 | 34.47 |
| | | | | | | | |
| T90(H)圆度 | 4.77 | 4.48 | 3.80 | 2.91 | 1.98 | 1.24 | 1.49 |
| Gain 15deg (dBi) | | | | | | | |
| E1(XZ)波瓣宽度 | 71.00 | 72.00 | 76.00 | 79.00 | 81.00 | 83.00 | 82.00 |
| E1(XZ)前后比 | 4.79 | 4.78 | 4.86 | 5.03 | 5.12 | 5.17 | 5.34 |
| E2(YZ)波瓣宽度 | 63.00 | 62.00 | 64.00 | 66.00 | 68.00 | 71.00 | 73.00 |
| E2(YZ)前后比 | 6.39 | 6.36 | 6.16 | 5.93 | 5.80 | 5.28 | 4.53 |
| 最大增益处轴比(P) | 21.13 | 20.13 | 19.05 | 17.99 | 17.19 | 21.04 | 23.70 |
| 仰角10度最差(大)轴比(P) | 66.58 | 76.40 | 85.19 | 67.76 | 92.91 | 65.88 | 89.24 |
| Hc(XY)波瓣宽度 | 219.00 | 262.00 | 296.00 | 360.00 | 360.00 | 360.00 | 360.00 |
| Hc(XY)前后比 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.30 | 0.83 |
| 左旋圆极化效率(%) | 16.65 | 20.06 | 24.28 | 28.86 | 32.81 | 34.93 | 34.97 |
| 右旋圆极化效率(%) | 14.05 | 16.68 | 19.80 | 22.99 | 25.51 | 26.99 | 28.04 |

四. Passive test data graph



五. Passive test data 3D diagram

