成都恒利泰科技有限公司
Chengdu HenryTech Technology co., Ltd

# 产品规格书 Product Datasheet

| 项目 Item | 内容 Description |
|---|---|
| 产品名称 Product Name | LTCC 天线 LTCC Antenna（RF Antenna） |
| 产品型号 Product Model | HM-ANT6020-2450-100M |
| 文档版本 Document Rev | V1.0 |

## 一、产品特性 Features

- 多层单片结构，可靠性高 Multilayer monolithic construction yields high reliability
- 低插损、小尺寸贴片设计 Low insertion loss and small size SMD chip design
- 简化复杂的调试与电路设计 Simplify complex tuning and circuit design
- LTCC 工艺 LTCC process

## 二、电气性能 Electrical Specifications（T = 25℃）

| No. | 项目 Item | 指标 Spec | 单位 Unit |
|---|---|---|---|
| 1 | 中心频率 Centre Frequency | 2450 | MHz |
| 2 | 带宽 Bandwidth | 100 (TYP) | MHz |
| 3 | 回波损耗 Return Loss | 10 min. | dB |
| 4 | 极化方式 Polarization | Linear（线极化） | |
| 5 | 方位面波束宽度 Azimuth Beamwidth | Omni-directional（全向） | |
| 6 | 峰值增益 Peak Gain | 3.5 (Typ.) | dBi |
| 7 | 输入阻抗 Input Impedance | 50 | Ω |

## 三、工作与存储条件 Operating & Storage Conditions

| 项目 Item | 指标 Specification |
|---|---|
| 工作温度 Operating Temperature（元器件 Component） | -40℃ ~ +105℃ |
| 存储温度 Storage Temperature（元器件 Component） | +5℃ ~ +35℃ |
| 焊接前存储温度 Storage before Soldering（含包装材料 Incl. packaging） | +5℃ ~ +35℃ |
| 焊接前存储湿度 Humidity | 45% ~ 75% RH |

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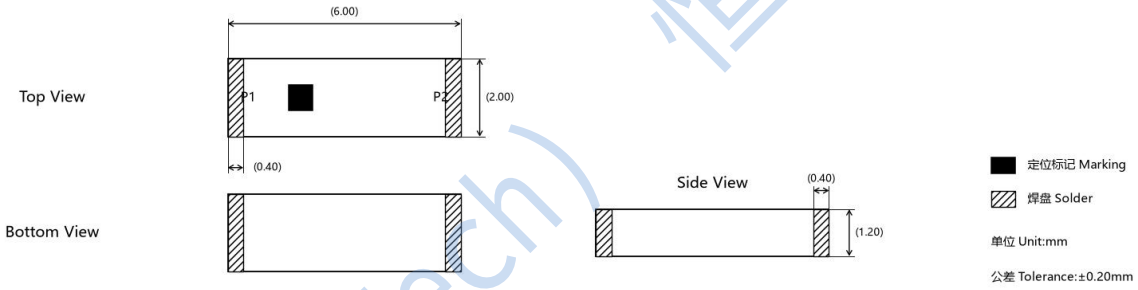
## 四、外形尺寸 Outline Drawing

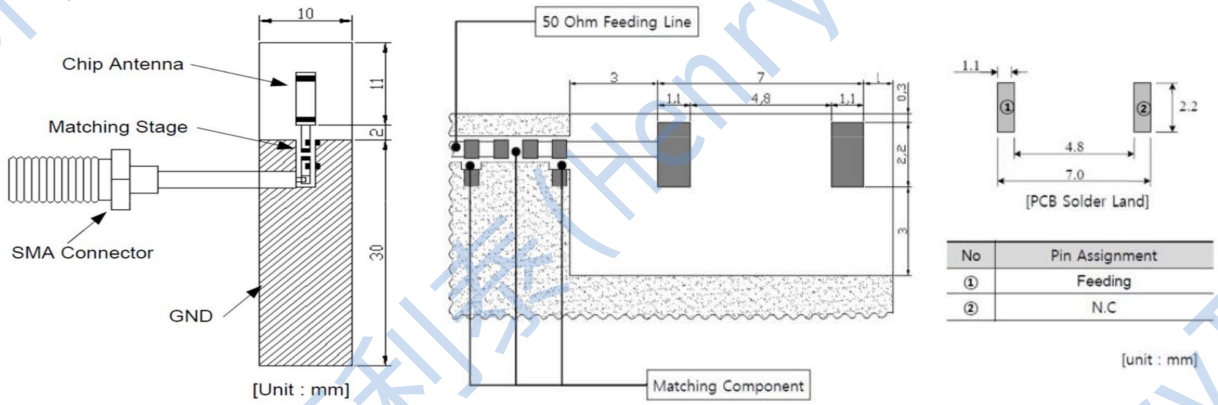



## 五、引脚定义 Pin Connections

| Pin No. | 功能 Function |
|---|---|
| 1 | 输入端 Input Port |
| 2 | 输出端 Output Port |

## 六、焊盘尺寸 PCB Land Pattern

### 评测板参考设计 Reference Design of Evaluation Board




| No | Pin Assignment |
|---|---|
| ① | Feeding |
| ② | N.C |

**注意 Notes:**

1. 线宽应设计为匹配 50Ω 特性阻抗，具体取决于 PCB 材料和厚度。Line width to be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.



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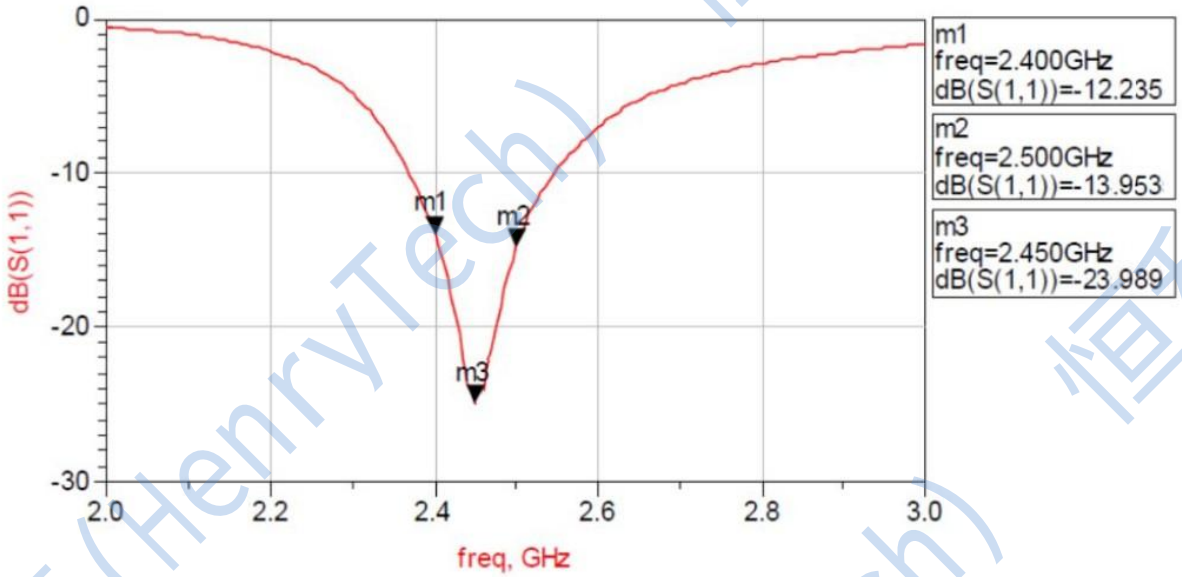
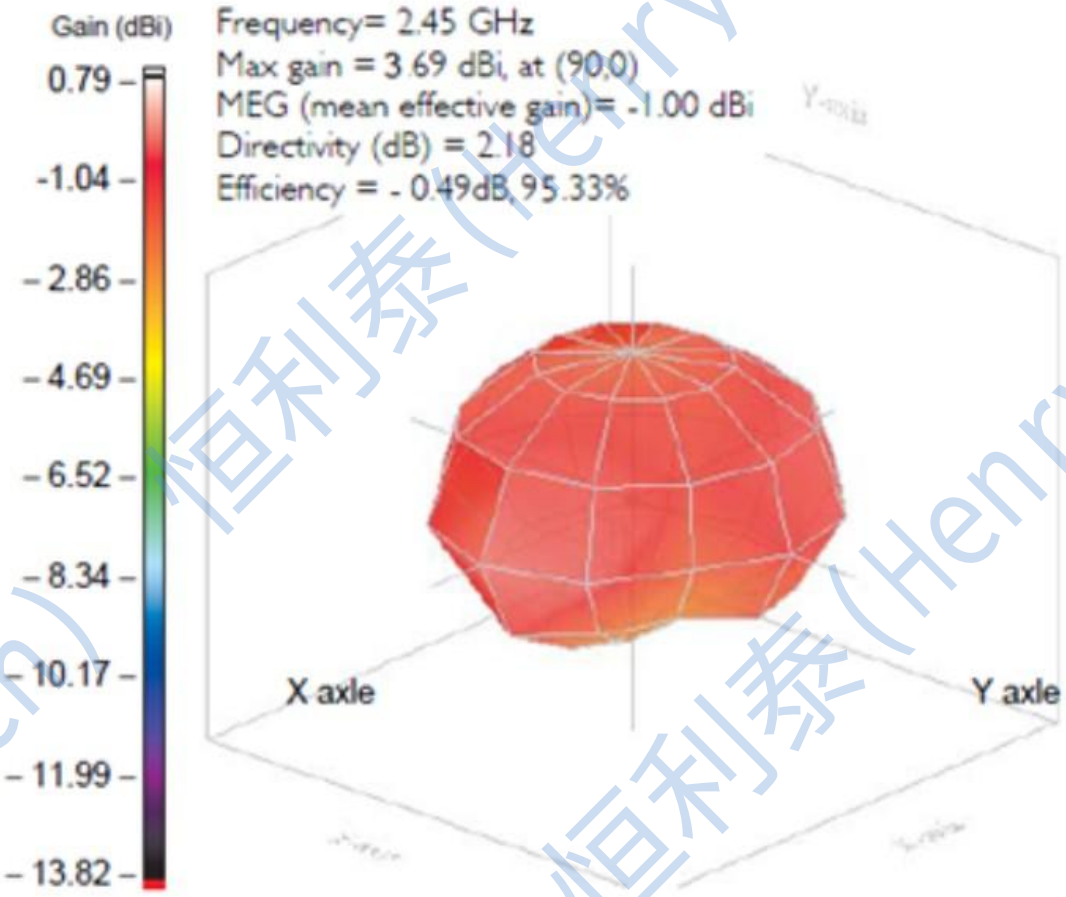
## 七、测试曲线 Typical Performance Characteristics（T = 25℃）




回波损耗 **Return Loss**




辐射方向图 **Radiation Pattern**



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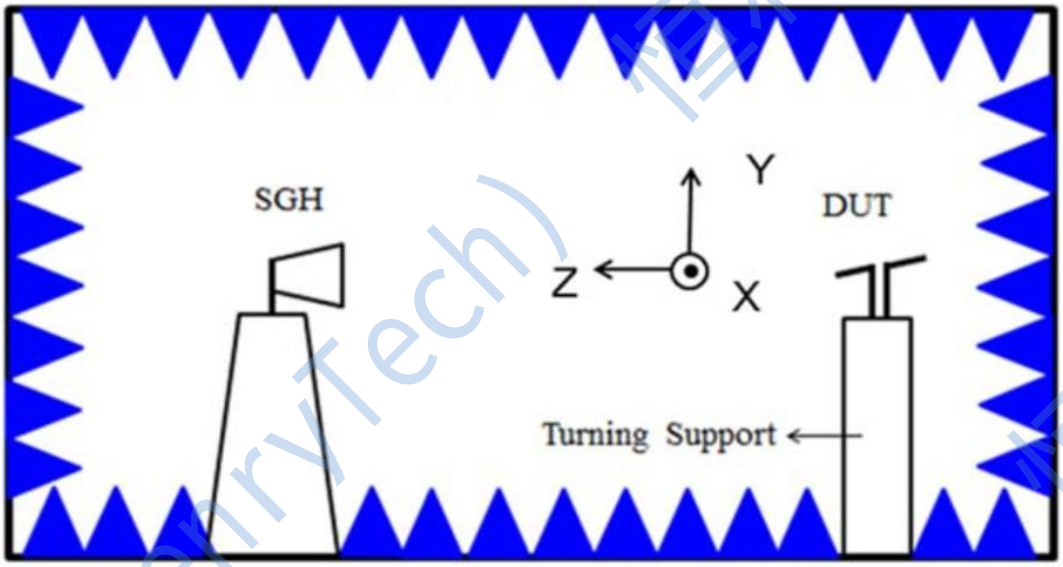
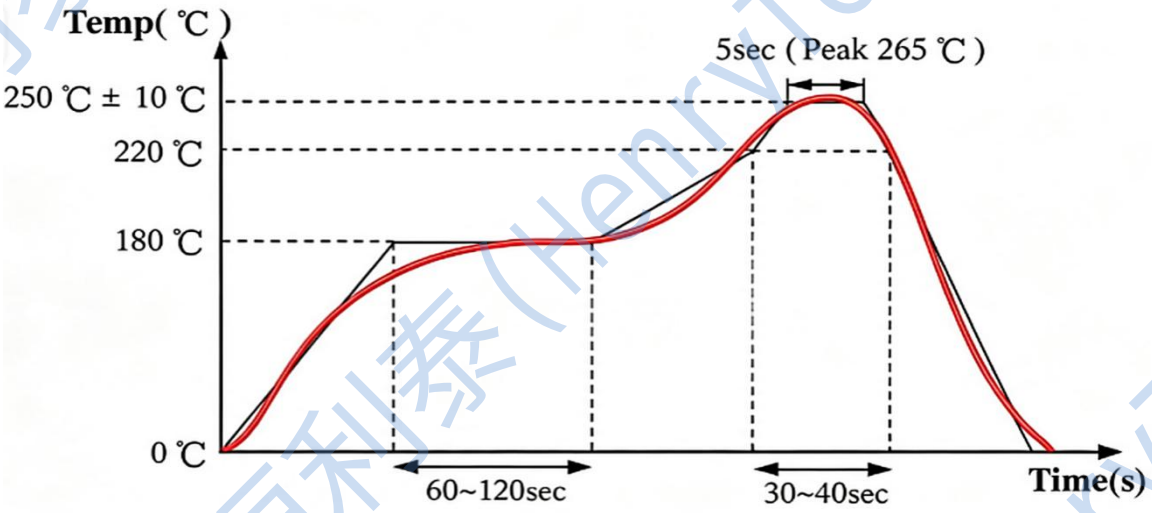



暗室坐标系统 **Chamber Coordinate System**

## 八、回流焊温度曲线 Reflow Soldering Profile



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