



上海增信电子有限公司

ShangHai Signal Plus Technology Co.,Ltd.

规格承认书

SPECIFICATION FOR APPROVAL

日期
DATE: 2019.03.25

版本
REV.: B

客 户
CUSTOMER: 德明通讯(上海)有限公司

客 户 料 号
CUSTOMER P/N:

品 名
PART NAME: 蓝牙陶瓷天线5220 for M7

供 方 料 号
SUPPLIER P/N: LA52H2450-A36

送样日期Date: 送样数量Q'TY: Pcs

客户确认CUSTOMER APPROVED BY		
核准 Approved by	审核 Checked by	拟制 Prepared by

供方确认SUPPLIER SIGNATURE		
核准 Approved by	审核 Checked by	拟制 Prepared by
Jack		andy

ZX-QT-RD-0011-A1

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Revision History

Version	Revision History	Date
V1	New Issue	2019.02.26



Signal Plus

M7-Antenna Test Report

©V1

2019.02.26

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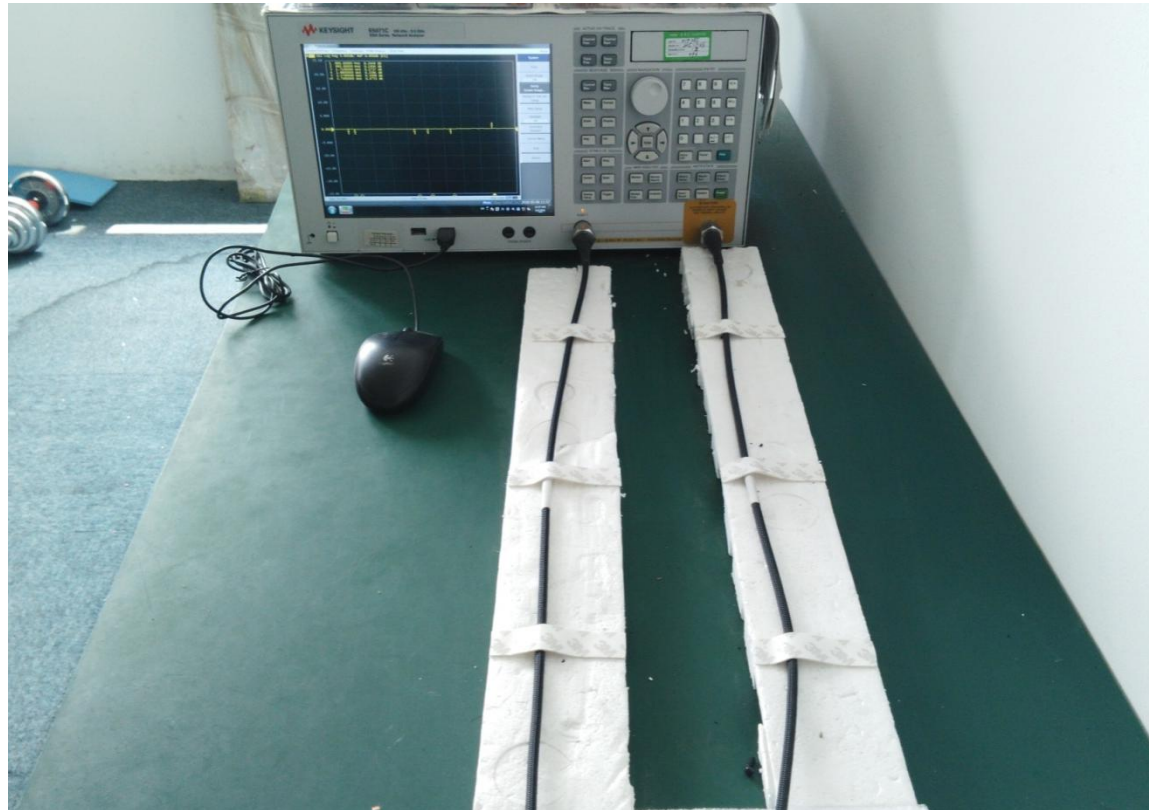
- Test setup
- Antenna Solution
- S Parameter---Return Loss, Isolation
- Efficiency and Peak Gain
- Radiation Patterns

1. Test system description---S Parameter

1.1. Test Setup

1.1.1 VNA Test Setup

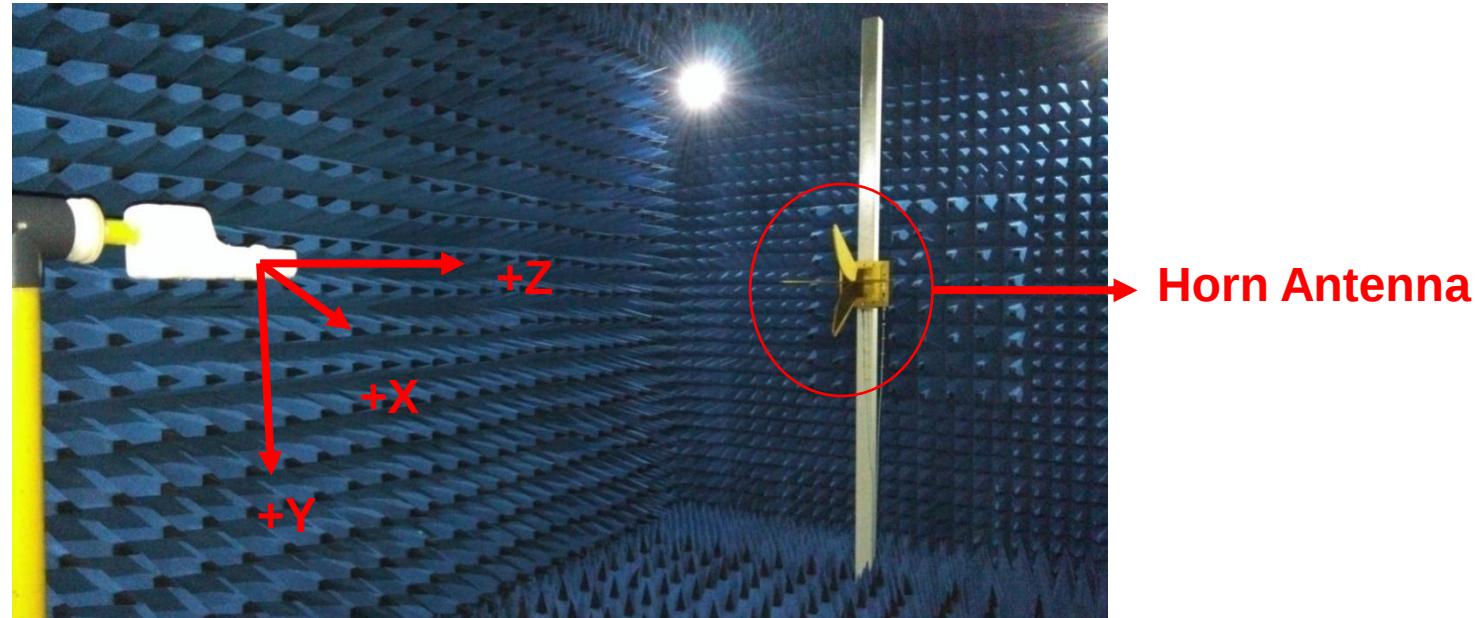
S parameter measurements (S_{11}) were performed using an Keysight E5071C Network Analyzer and previously described test fixtures. The isolation between antennas is also tested. The testing was performed with apparatus in free space.



1. Test system description--- Anechoic Chamber Test Setup

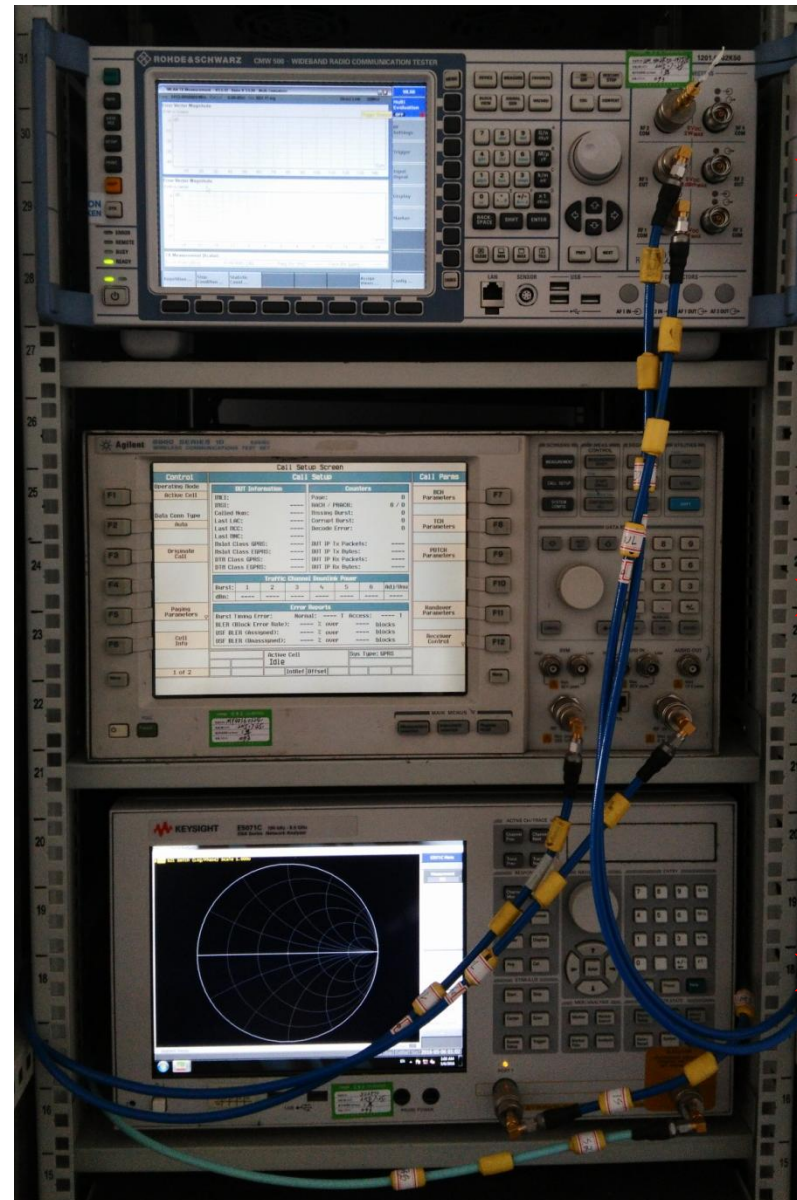
1.1.2 Anechoic Chamber Test Setup

The gain of the antenna was measured in the anechoic chamber(ETS-3D). The chamber provides less than -30 dB reflectivity from 400 MHz through 6 GHz. The chamber size is: 7m*4m*3m. The measurement results are calibrated using a leaky wave horn standard. We can measure the antenna gain and efficiency accurately.



1. Test system description--- Test Instruments

1.1.3 Instruments



R&S CMW500
4G/WIFI
(LTE/WIFI b/g/a)

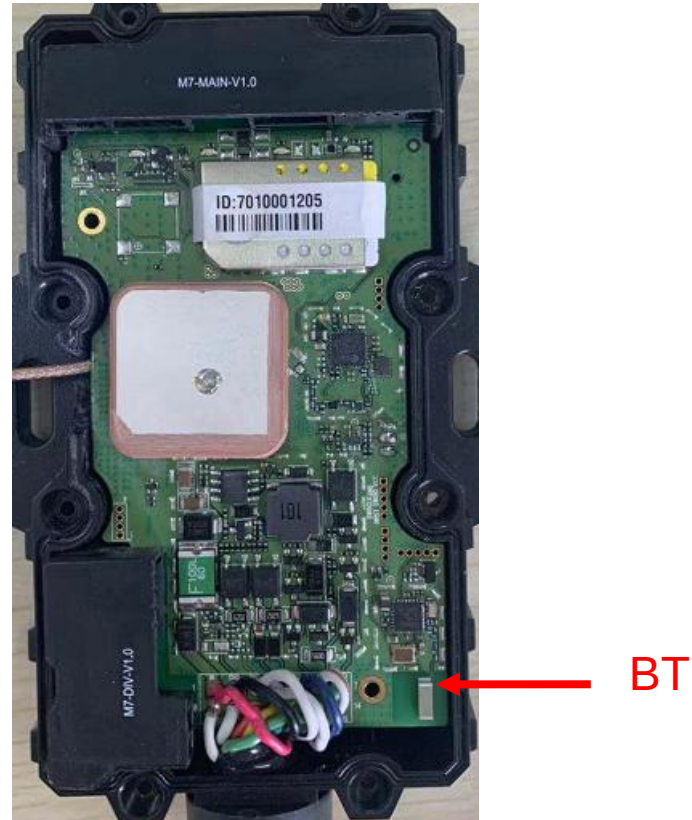
Agilent 8960
2G/3G
(GSM/CDMA/WCDMA)

KeySight E5071C
(400MHz~6GHz)

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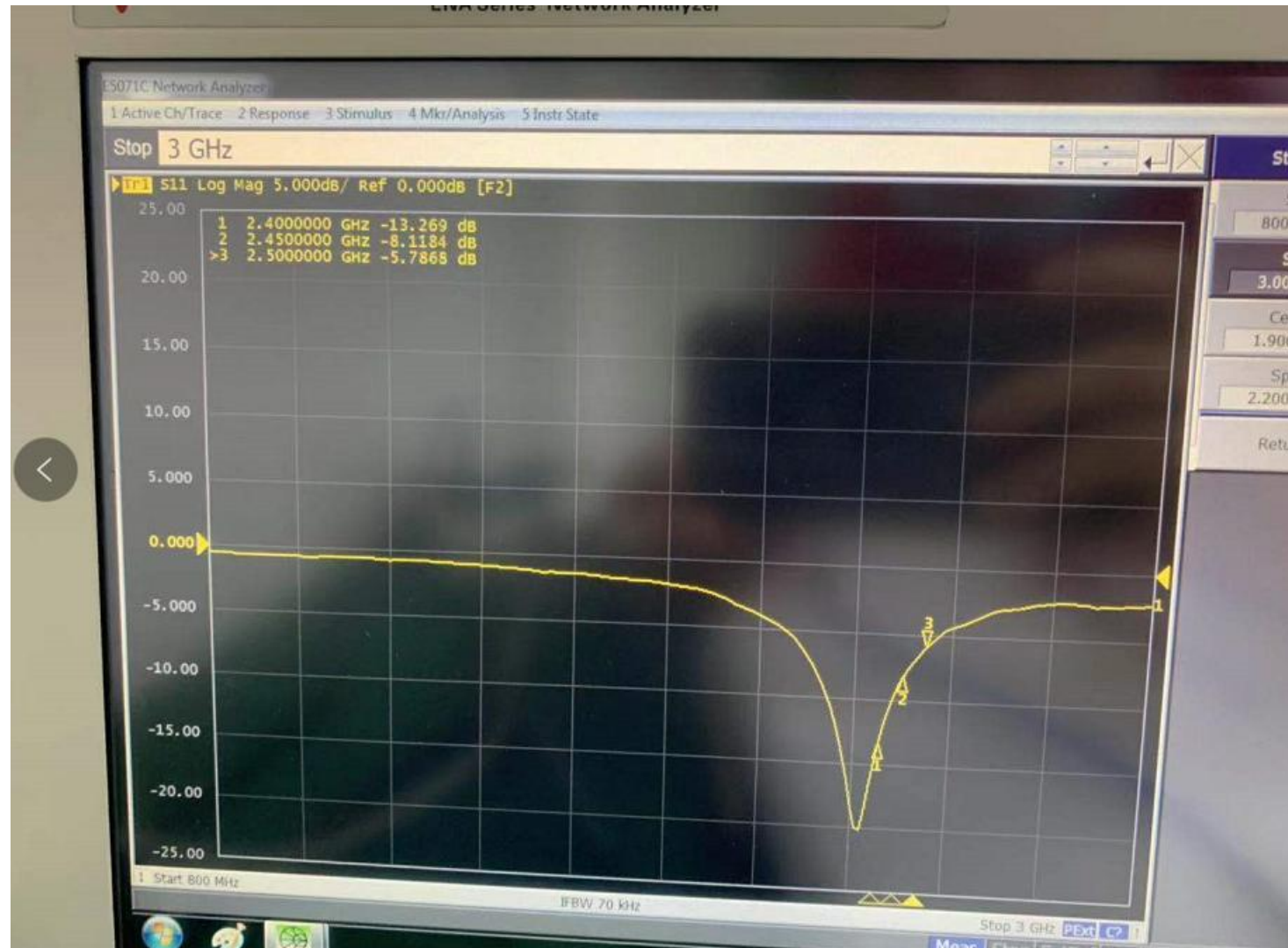
2. Antenna Solution

2.1 Antenna Location Pictures



3.Test Result--Return Loss

S11(ANT1):



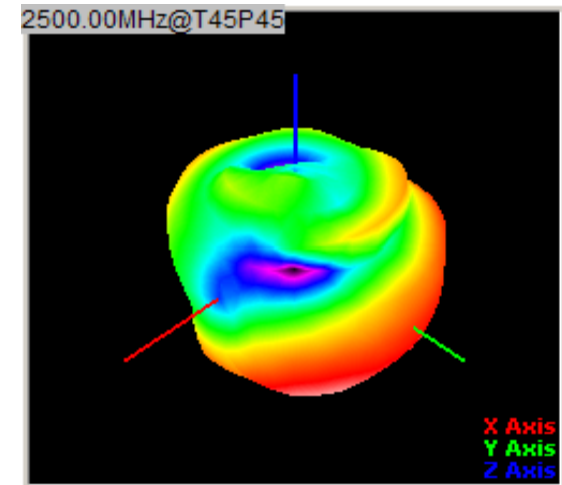
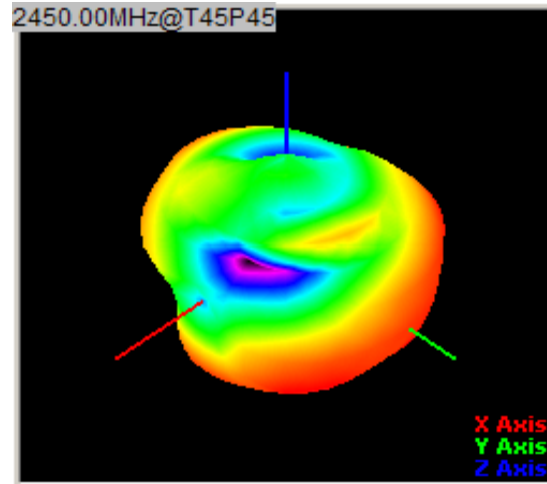
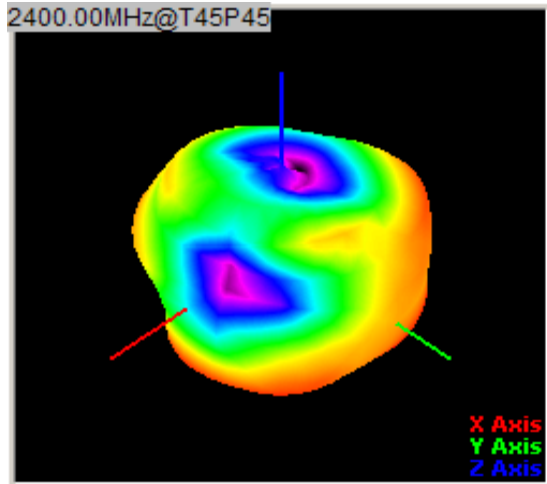
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3.Test Result---Efficiency、 Gain

Data:

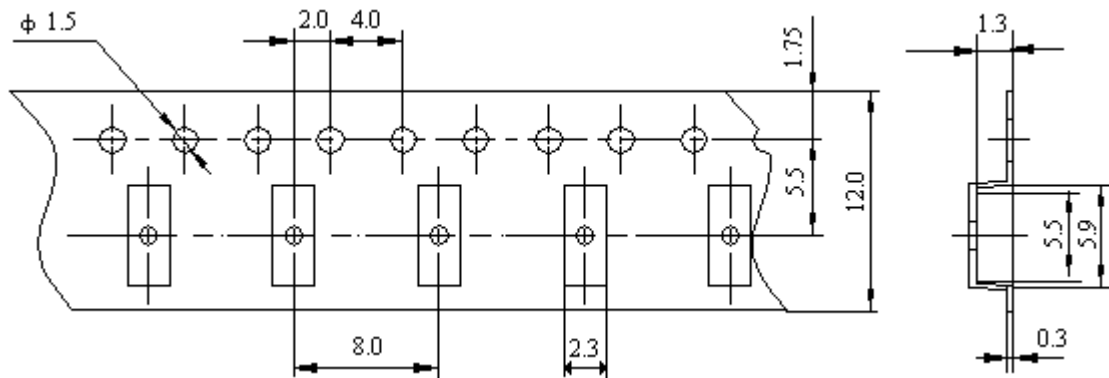
Freq.(MHz)	2400	2450	2500
Gain(dBi)	2.9	3.3	2.3
Eff.	42%	43%	39%

3.Test Result--Radiation Patterns



11 包装尺寸 (5220) Packaging and Dimensions

11.1 Plastic Tape

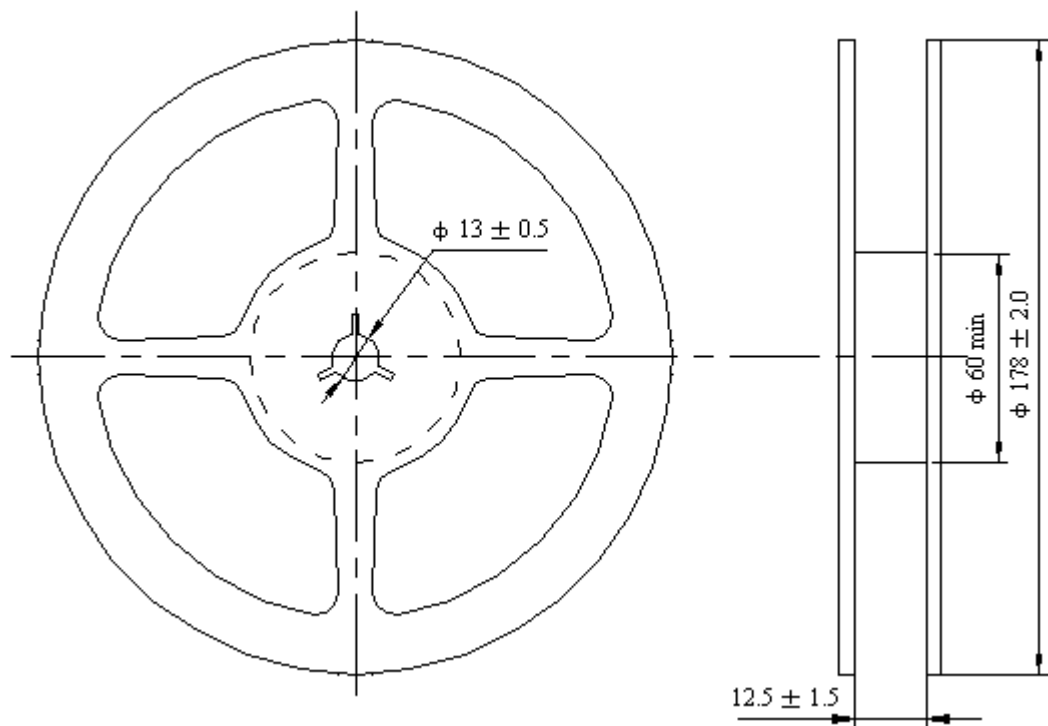


包装说明: Remarks for Package

载带尾部空穴长度 150~200mm, 载带头部空穴长度 250~300mm, 头部的盖带加长 250mm。

Reserve a length of 150~200mm for the trailer of the carrier and 250~300 mm for the leader of the carrier and further 250mm of cover tape at the leading part of the carrier.

11.2 Reel (1000 pcs/Reel)



11.3 储存条件 Storage Period

易氧化产品, 产品拆封后请于 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!