

# 产品规格承认书

## SPECIFICATIONS

客户:

CUSTOMER: \_\_\_\_\_

产品名称:

DESCRIPTION: Monopole Antenna

客户型号:

CUSTOMER PART No: \_\_\_\_\_

产品型号:

OUR MODEL NO: PBX5621DA01

日期:

DATE: 2021/01/22


确认签字, 盖章后请返回承认书一份

PLEASE RETURN TO US ONE COPY OF “SPECIFICATION FOR APPROVAL”

WITH YOUR APPROVED SIGNATURES

核准	王海	审核	刘飞	制作	刘小美
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客户确认签章 (APPROVED SIGNATURE)			

UNLESS OTHER SPECIFIED TOLERANCES ON: X=±      X.X=±      X.XX=± ANGLES=±      HOLE DIA=±		 Shenzhen Pengban Xingye Technology Co., Ltd	
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TITLE: CHIP 2450-5621		DOCUMENT NO.	SPEC REV.
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## PBX5621DA01 Specification

Operating Temp. : -40℃~+85℃

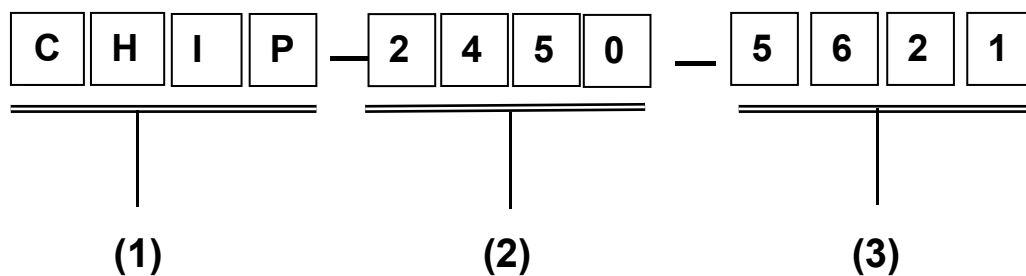
### 1. FEATURES:

- Light weight, compact
- Wide bandwidth, low cost
- Built-in antenna with high gain

### 2. APPLICATIONS:

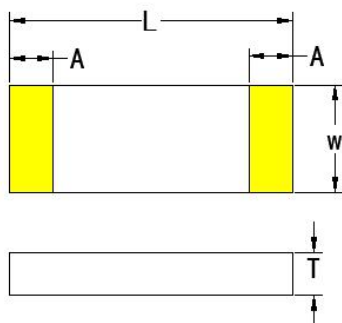
- Bluetooth, Wireless LAN, Mobile TV
- Home RF System, etc

### 3. PRODUCT IDENTIFICATION



- (1) Product type: Multilayer chip Antenna  
 (2) Center Frequency: 2450MHz  
 (3) External Dimensions (L×W) (mm): 5.6\*2.1

### 4. SHAPE AND DIMENSIONS:



Unit:mm	L	W	A	T
<b>CHIP-5621</b>	5.6±0.2	2.15±0.2	0.45±0.1	1.15±0.1

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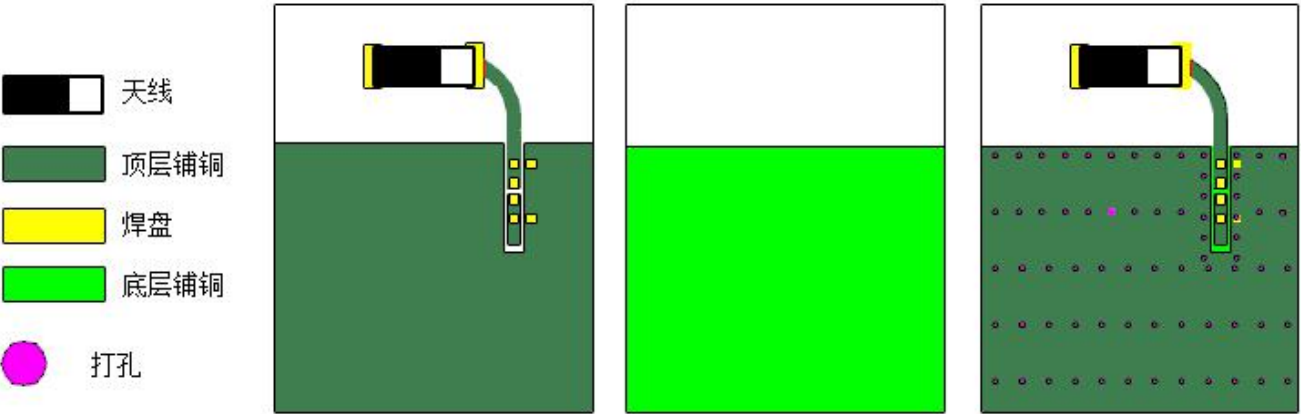
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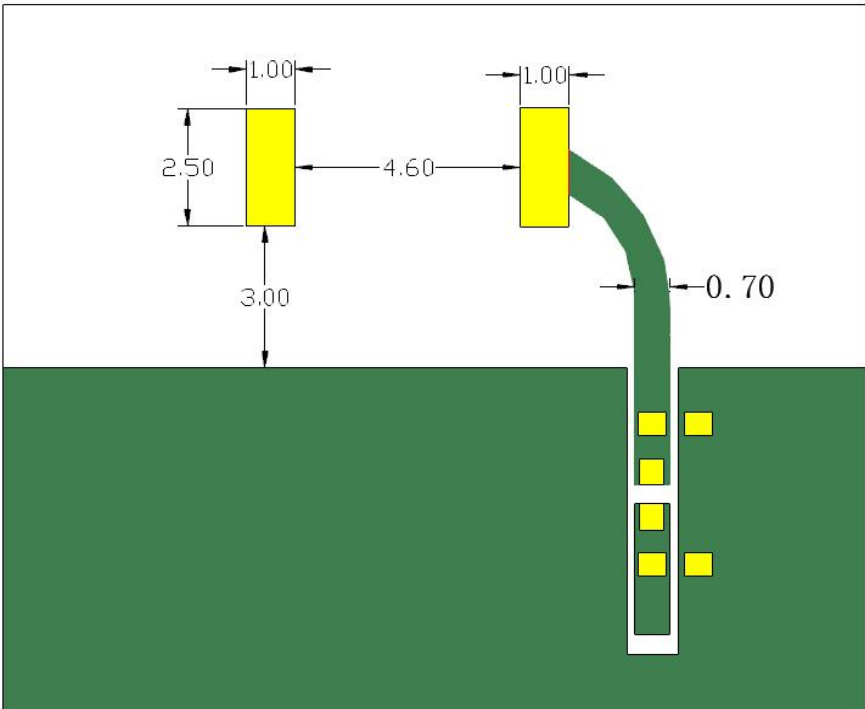
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测试板参考尺寸:

单位: mm



PBX5621DA01 焊盘尺寸:



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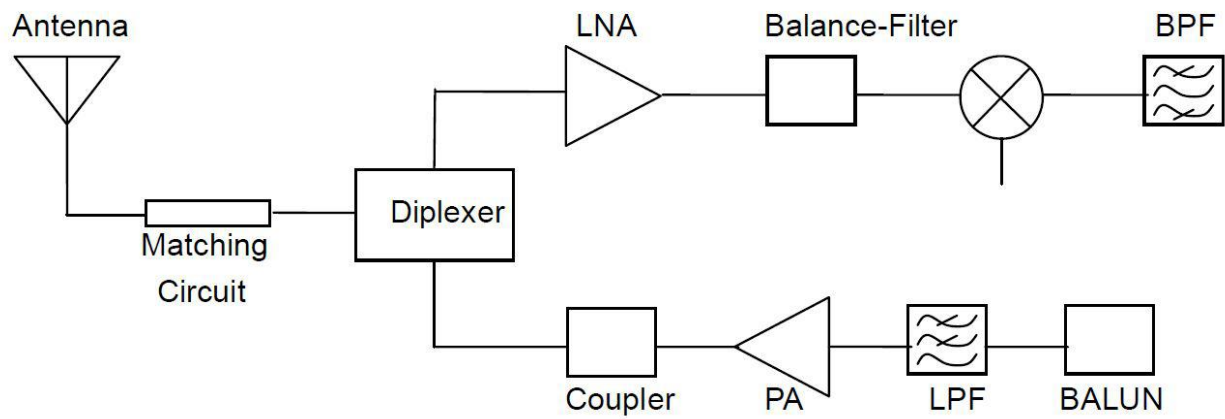
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APPLICATION GUIDE



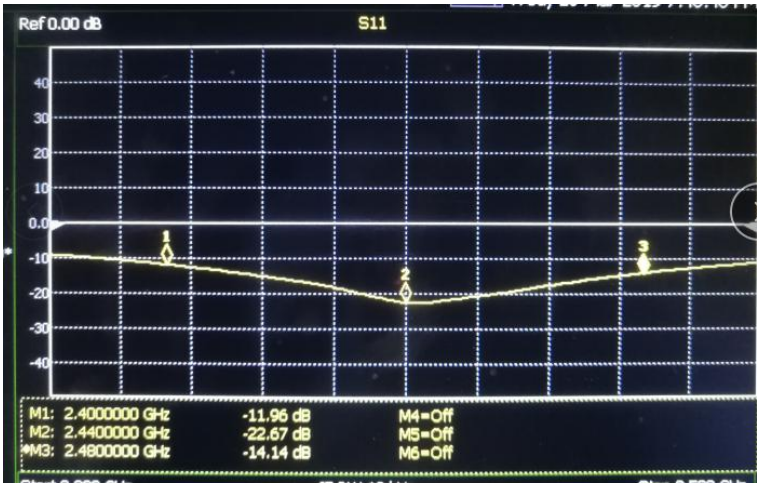
5. SPECIFICATIONS:

测试项	规格
应用频段	2400-2500MHz
极化方式	线极化
*最大增益	5dBi
*效率	70.10%
输入阻抗	50 Ω

\* Test condition: Test board size 86\*50 mm  
Matching circuit: Pi matching circuit will be required

6. Electrical Characteristics :

Retune Loss



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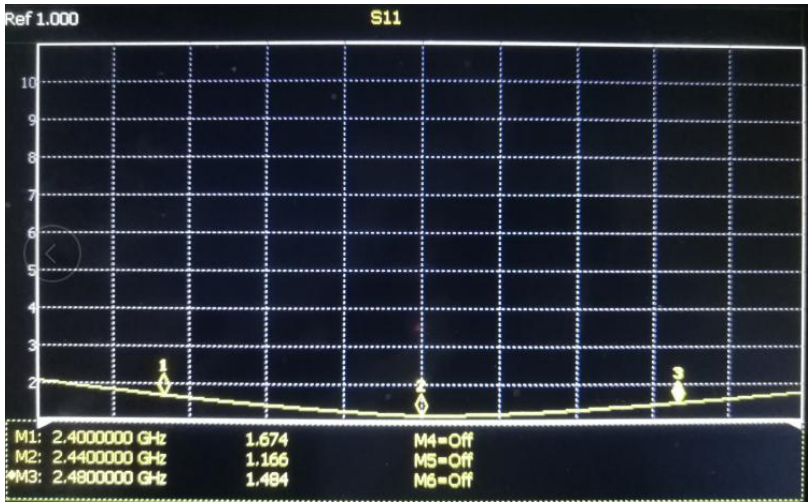
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**VSWR**



Mark	Frequency	VSWR
1	2400 MHz	1.674
2	2440 MHz	1.166
3	2480 MHz	1.484

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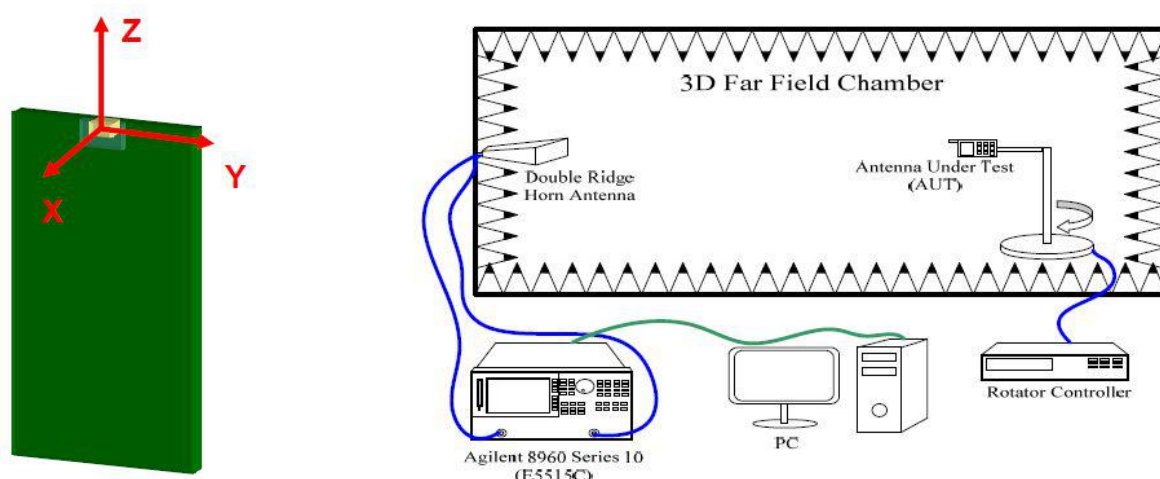
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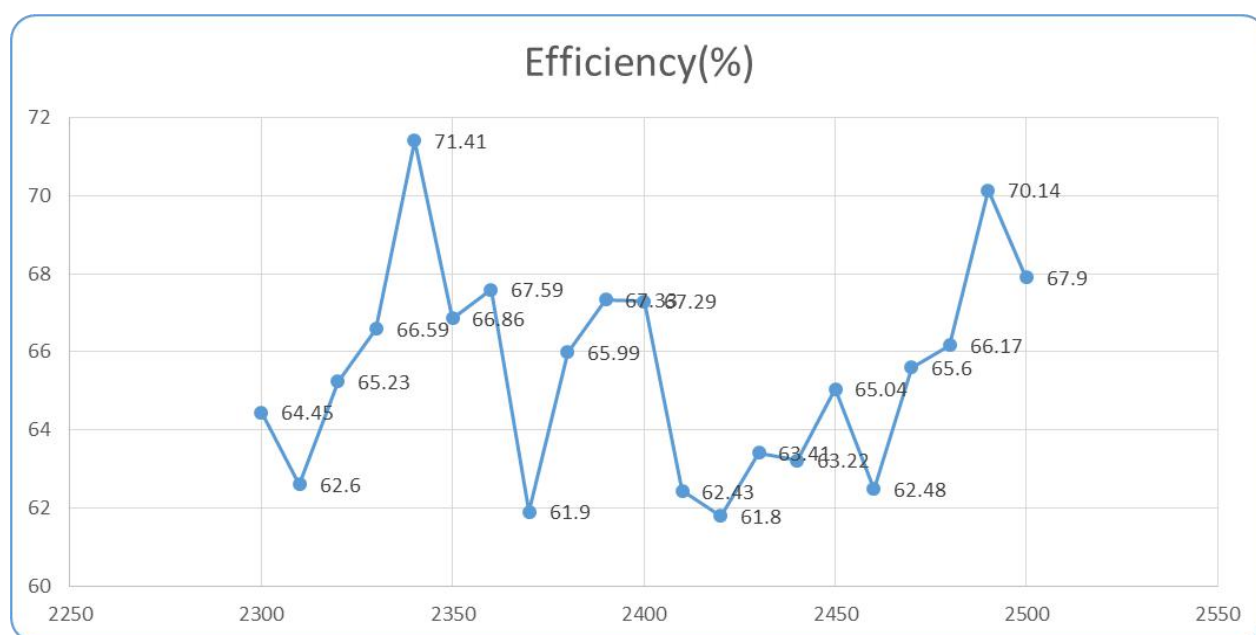
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## Radiation Pattern

The Gain pattern is measured in FAR-field chamber. DUT is placed on the table of rotator, a standard horn antenna and Vector Network Analyzer is used to collect data.



## Efficiency



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ANGLES =  $\pm$

HOLE DIA =  $\pm$



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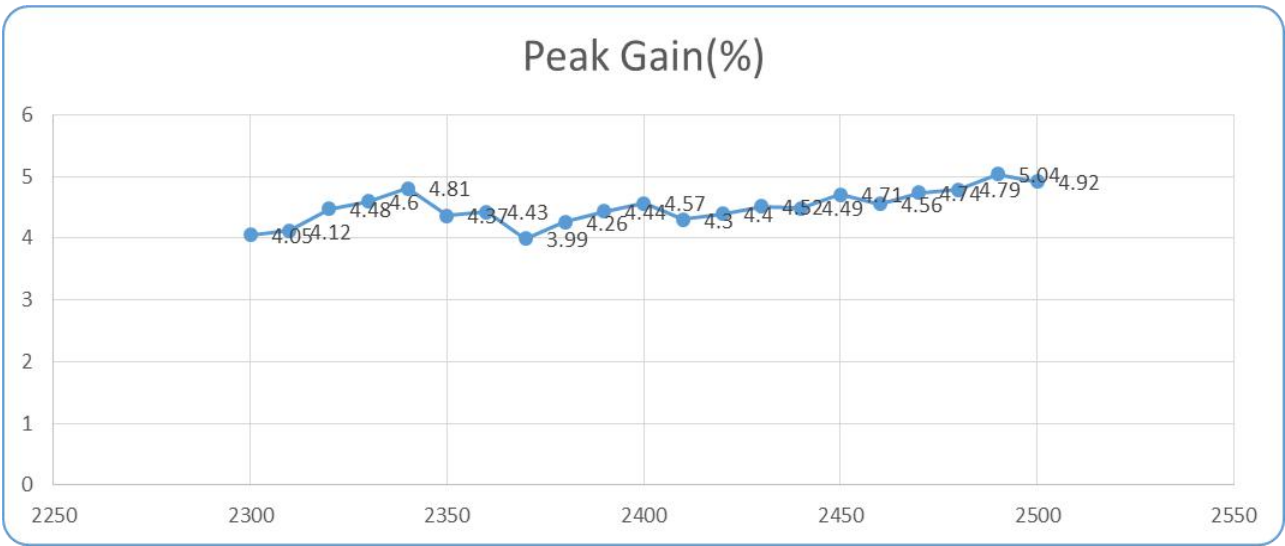
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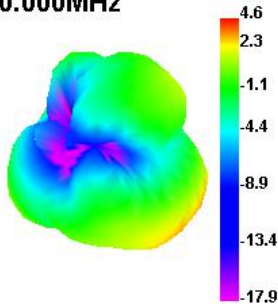


◎ Maximum Gain

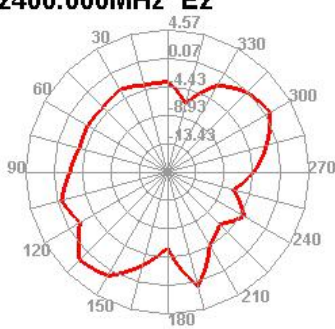


◎ 3D Gain Pattern (2400 MHz)

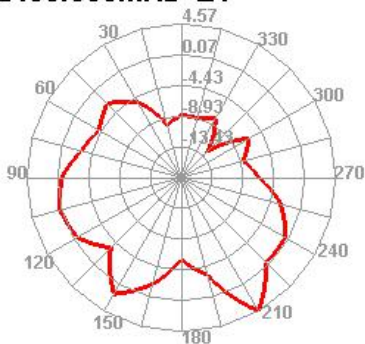
2400.000MHz



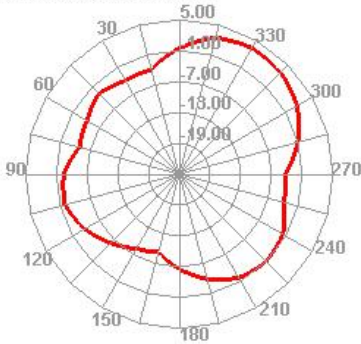
2400.000MHz E2



2400.000MHz E1



2400.000MHz H



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ANGLES=±      HOLE DIA=±

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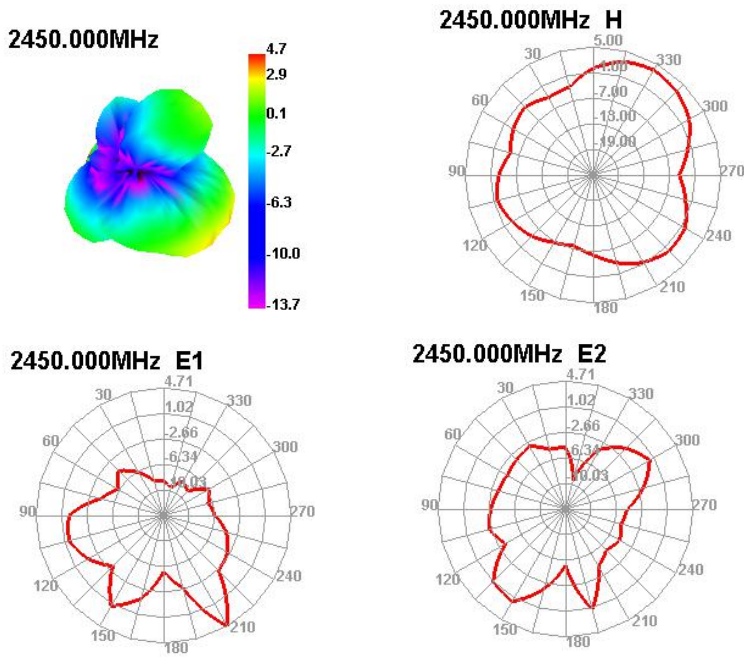
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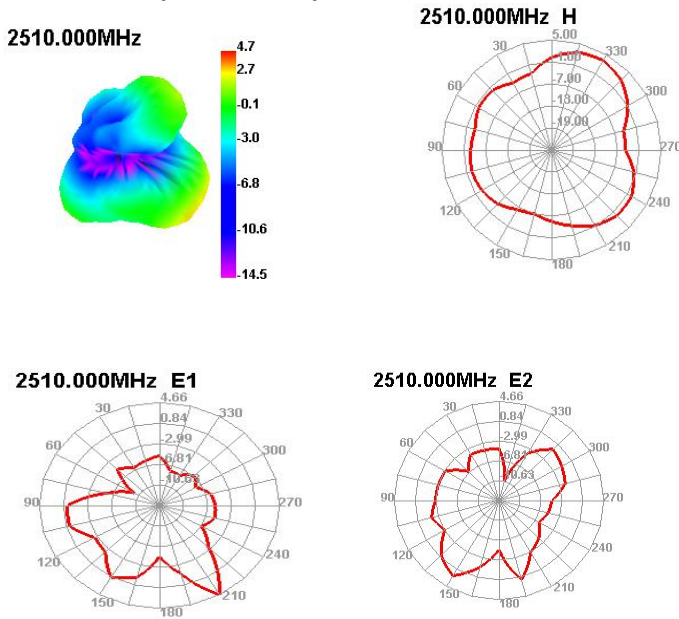
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◎ 3D Gain Pattern (2450 MHz)



◎ 3D Gain Pattern (2510 MHz)



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## 7. Environmental Characteristics

### (1) Reliability Test

Item	Condition	Specification
Thermal shock	1. $30\pm 3$ minutes at $-40^{\circ}\text{C}\pm 5^{\circ}\text{C}$ , 2. Convert to $+105^{\circ}\text{C}$ (5 minutes) 3. $30\pm 3$ minutes at $+105^{\circ}\text{C}\pm 5^{\circ}\text{C}$ , 4. Convert to $-40^{\circ}\text{C}$ (5 minutes) 5. Total 100 continuous cycles	No apparent damage Fulfill the electrical spec. after test.
Humidity resistance	1. Humidity: 85% R.H. 2. Temperature: $85\pm 5^{\circ}\text{C}$ 3. Time: 1000 hours.	No apparent damage Fulfill the electrical spec. after test.
High temperature resistance	1. Temperature: $150^{\circ}\text{C}\pm 5^{\circ}\text{C}$ 2. Time: 1000 hours.	No apparent damage Fulfill the electrical spec. after test.
Low temperature resistance	1. Temperature: $-40^{\circ}\text{C}\pm 5^{\circ}\text{C}$ 2. Time: 1000 hours.	No apparent damage Fulfill the electrical spec. after test.
Soldering heat resistance	1. Solder bath temperature : $260\pm 5^{\circ}\text{C}$ 2. Bathing time: $10\pm 1$ seconds	No apparent damage
Solderability	The dipped surface of the terminal shall be at least 95% covered with solder after dipped in solder bath of $245\pm 5^{\circ}\text{C}$ for $3\pm 1$ seconds.	No apparent damage

### (2) Storage Condition

#### (a) At warehouse:

The temperature should be within  $0\sim 30^{\circ}\text{C}$  and humidity should be less than 60% RH.

The product should be used within 1 year from the time of delivery.

#### (b) On board:

The temperature should be within  $-40\sim 85^{\circ}\text{C}$  and humidity should be less than 85% RH.

### (3) Operating Temperature Range

Operating temperature range :  $-40^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$ .

UNLESS OTHER SPECIFIED TOLERANCES ON:

$X=\pm$

$X.X=\pm$

$X.XX=$

ANGLES  $=\pm$

HOLE DIA  $=\pm$



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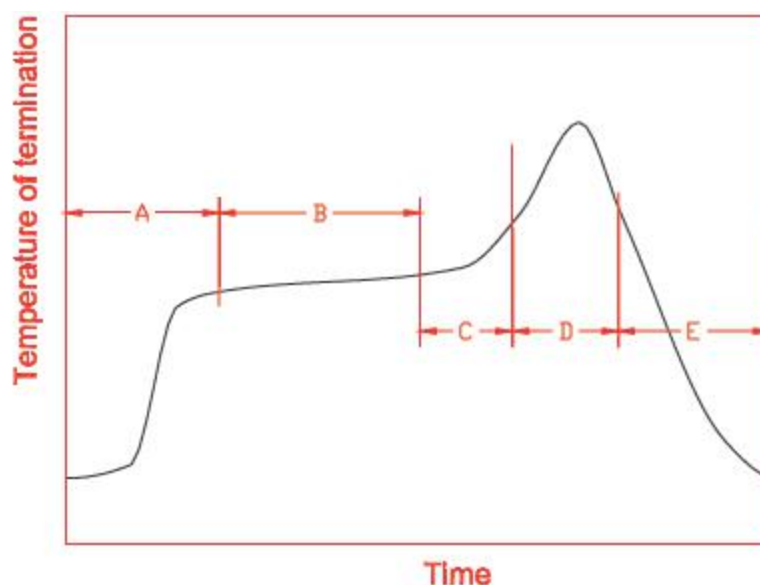
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## 8. Recommended Reflow Soldering



A	1 <sup>st</sup> rising temperature	The normal to Preheating temperature	30s to 60s
B	Preheating	140°C to 160°C	60s to 120s
C	2 <sup>nd</sup> rising temperature	Preheating to 200°C	20s to 40s
D	Main heating	if 220°C	50s~60s
		if 230°C	40s~50s
		if 240°C	30s~40s
		if 250°C	20s~40s
		if 260°C	20s~40s
E	Regular cooling	200°C to 100°C	1°C/s ~ 4°C/s

\*reference: J-STD-020C


### (1) Soldering Gun Procedure

Note the follows, in case of using solder gun for replacement.

- The tip temperature must be less than 350°C for the period within 3 seconds by using soldering gun under 30 W.
- The soldering gun tip shall not touch this product directly.

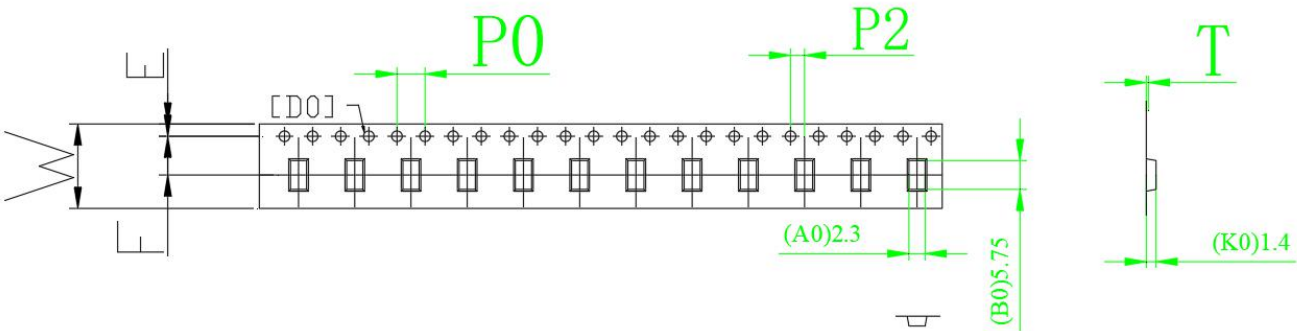
### (2) Soldering Volume

Note that excess of soldering volume will easily get crack the body of this product.

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9. Taping Package and Label Marking: (unit: mm)

(1) Quantity/Reel: 3000pcs/Reel



ITEM	W	A0	B0	K0	K1	P	F	E	S0	D0	D1	P0	P2	T
DIM	12.00	2.30	5.75	1.40	0.00	8.00	5.50	1.75	52.40	1.50	0.00	4.00	2.00	0.30

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