# 产品规格承认书 **SPECIFICATIONS**

•	学户: USTOMER:	Shenzhen	Pengl	oan Xi	ingye Te	chnolog	gy Co., Ltd	
产	产品名称:							
D	ESCRIPTIO	N:		蓝	牙天线			
名	客户型号:							
C	USTOMER P.	ART No:						
ਨੇ	产品型号:							
0	UR MODEL	NO:		PΒΣ	K3215MA0	1		
E	日期:							
D	DATE:20			202	20/12/22			
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		客户确认	人签章(	(APPRO	OVED SIG	NATURE)		
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**DOCUMENT** 

NO.

SPEC REV

P1

3215 单极

TITLE: CHIP2440-3215 单极 Specification

# PBX3215MA01 单极 Specification

Operating Temp. : -40 ℃~+85 ℃

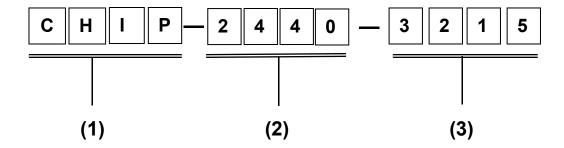
#### 1. FEATURES:

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

## 2. APPLICATIONS:

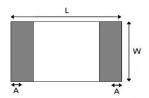
- Bluetooth, Wireless LAN, Mobile TV
- Home RF System, etc

### 3. PRODUCT IDENTIFICATION



- (1) Product type: Multilayer chip Antenna
- (2) Center Frequency: 2440MHz
- (3) External Dimensions (L×W) (mm): 3.2\*1.5

### 4. SHAPE AND DIMENSIONS:





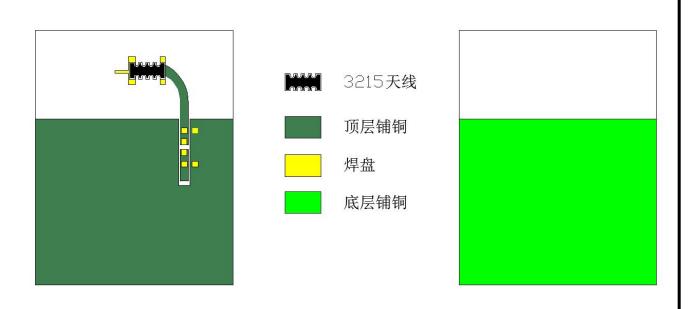
#### SHAPE AND DIMENSIONS

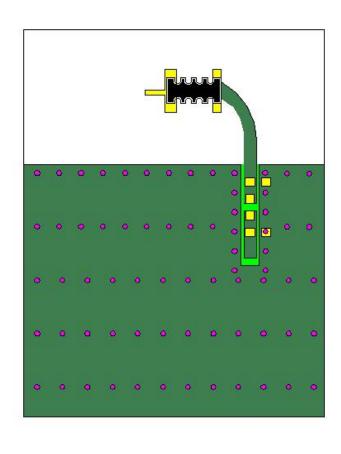
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3.2±0.2	1.5±0.2	0.52±0.1	0.3±0.1	

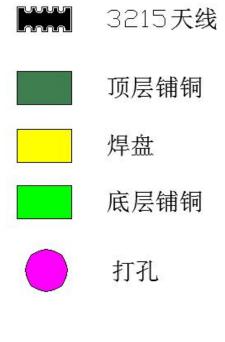
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TITLE: CHIF 2440-3213 平板 Specification		NO.	J210 <del>1</del>	=1X <sub>2</sub>	P1

## 测试板参考尺寸:

单位: mm

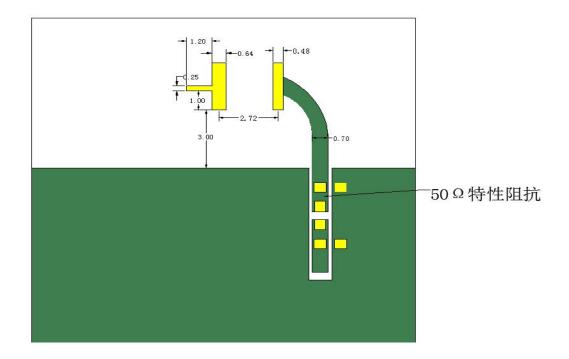






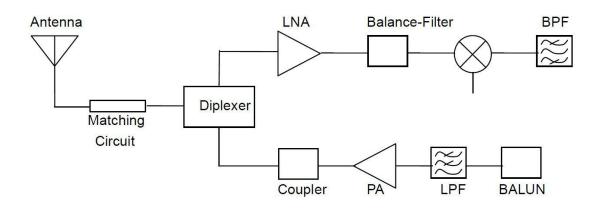
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TITLE: CHIP2440-3213 单板 Specification		NO.	3213 平似	3	P1	

# PBX3215MA01 焊盘尺寸:



## 打孔参考示意图

# APPLICATION GUIDE



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## 5. SPECIFICATIONS:

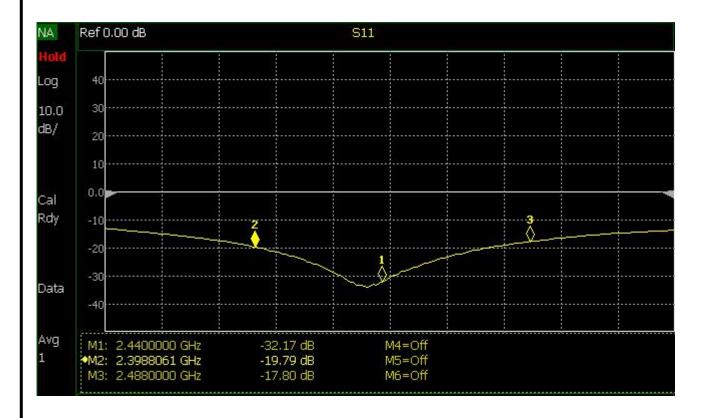
测试项	规格
带宽	2400~2483MHz
极化方式	线极化
*最大增益	2.5dBi
*效率	68%
输入阻抗	50 Ω

\* Test condition: Test board size 90\*40 mm

Matching circuit: Pi matching circuit will be required

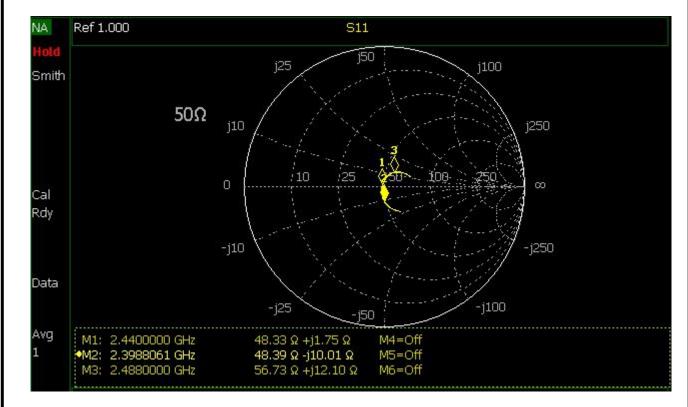
# 6. Electrical Characteristics:

## 回波损耗

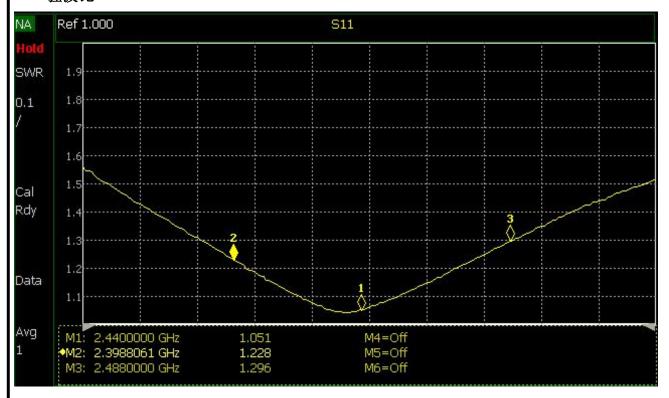


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# Simth 圆图



## 驻波比

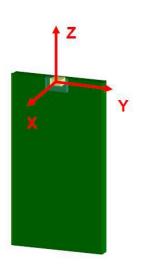


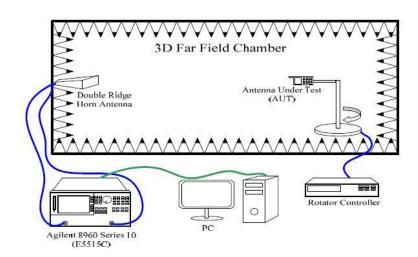
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Mark	Frequency	VSWR
1	2400 MHz	1. 228
2	2440 MHz	1.051
3	2480 MHz	1. 296

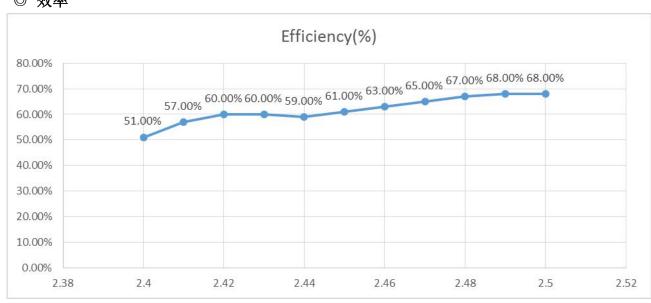
#### **Radiation Pattern**

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.



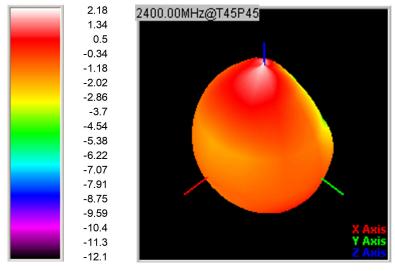


#### ◎ 效率

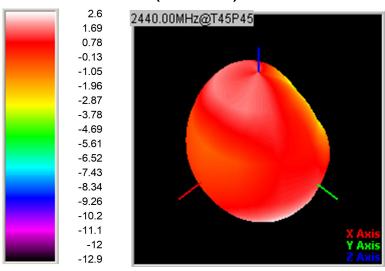


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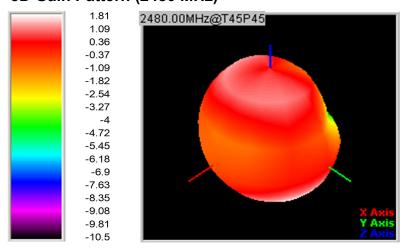
## 



## O 3D Gain Pattern (2440 MHz)



## O 3D Gain Pattern (2480 MHz)



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# 7. Environmental Characteristics

## (1) Reliability Test

Item	Condition	Specification
Thermal shock	<ol> <li>30±3 minutes at -40° C±5° C,</li> <li>Convert to +105° C (5 minutes)</li> <li>30±3 minutes at +105° C±5° C,</li> <li>Convert to -40° C (5 minutes)</li> <li>Total 100 continuous cycles</li> </ol>	No apparent damage Fulfill the electrical spec. after test.
Humidity resistance	1. Humidity: 85% R.H. 2. Temperature: 85±5° C 3. Time: 1000 hours.	No apparent damage Fulfill the electrical spec. after test.
High temperature resistance	1. Temperature: $150^{\circ}$ C $\pm 5^{\circ}$ C 2. Time: $1000$ hours.	No apparent damage Fulfill the electrical spec. after test.
Low temperature resistance	1. Temperature: $-40^{\circ}$ C $\pm 5^{\circ}$ C 2. Time: 1000 hours.	No apparent damage Fulfill the electrical spec. after test.
Soldering heat resistance	1. Solder bath temperature : $260\pm5$ °C 2. Bathing time: $10\pm1$ 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 $245\pm5^\circ\mathrm{C}$ for $3\pm1$ 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:

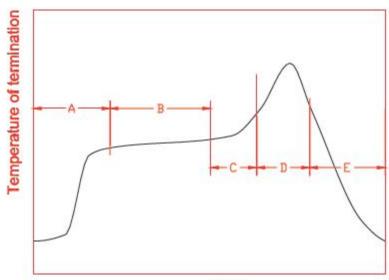
The temperature should be within -40~85°C and humidity should be less than 85% RH.

## (3) Operating Temperature Range

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

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## 8. Recommended Reflow Soldering



#### Time

Α	1 <sup>st</sup> rising temperature	The normal to Preheating temperature	30s to 60s
В	Preheating	140°C to 160°C	60s to 120s
С	2 <sup>nd</sup> rising temperature	Preheating to 200°C	20s to 40s
D		if 220°C	50s~60s
	Main heating	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
	790305 703		

<sup>\*</sup>reference: J-STD-020C

### (1) Soldering Gun Procedure

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

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

## (2) Soldering Volume

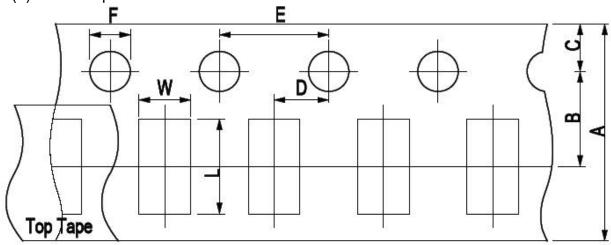
Note that excess of soldering volume will easily get crack the body of this product.

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

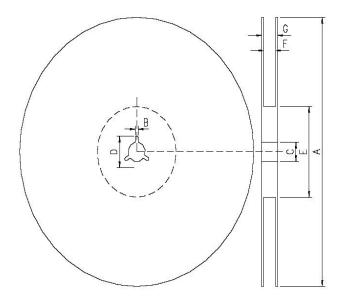
(1) Quantity/Reel: 5000pcs/Reel

(2) Carrier tape dimensions



A	В	С	D	Е	F	L	W
8.00 $\pm$ 0.3	$3.50\pm0.05$	$1.75\pm0.1$	$2.00\pm0.05$	$4.00\pm0.1$	$1.50\pm0.1$	$2.30\pm0.1$	$1.55\pm0.1$

## (4) Taping reel dimensions



A	178.0±2.0
В	2.0±0.5
C	13.0±0.5
D	21.0±0.8
E	62.0±1.5
F	9.0±0.5
G	13.0±1.0

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