# **SPECIFICATIONSA**

بد بجر	
XH	۰
日/	۰

客尸:	
CUSTOMER:	Shenzhen Yuanxin Chuangzhan Supply Chain Co., Ltd
产品名称。	
DESCRIPTI(	N: Chip antenna
客户型号: CUSTOMER I	951
产品型号:	
OUR MODEL	NO: <b>PBX3216MC02</b>
70 地址:  Lu Aaress:	01, Block A, Rongchuang Zhihui Building, Minzhi Street, onghua New District,Shenzhen,China
	章后请返回承认书一份 FURN TO US ONE COPY OF "SPECIFICATION FOR APPROVAL"

	客户承认签印 Customer recognition				
		日期 Date			
UNLESS OTHER SPECIFIED TOLERANCES ON: X=± X.X=± X.XX= 深圳市朋伴兴业科技有限 ANGLES=± HOLEDIA=± PengBanXingYe ShenZhen Technology C					
SCALE:	CALE: N/A UNIT: mm THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY O				
DRAWN B	BY : Sera	CHECKED BY: XD	TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OF		
DESIGNE	D BY: Sera	APPROVED BY: XD	DEVICES WITHOUT PERMISSION		
	TITLE CHID2450 2246 Specification		DOCUMENT	3216	SPEC REV.
TITLE: CHIP2450-3216 Specification		NO.	3210	P1	

## PBX3216MC02 Specification

Operating Temp. : -40℃~+85℃

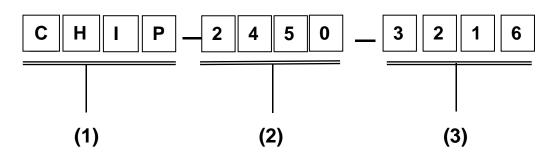
## **1. FEATURES:**

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

## **2. APPLICATIONS:**

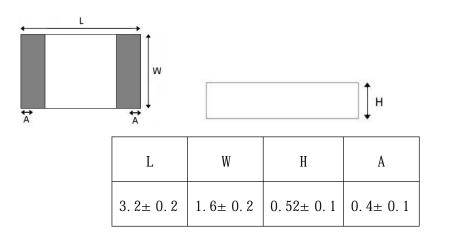
- Bluetooth, Wireless LAN, Mobile TV
- Home RF System, etc

# **3. PRODUCT IDENTIFICATION**

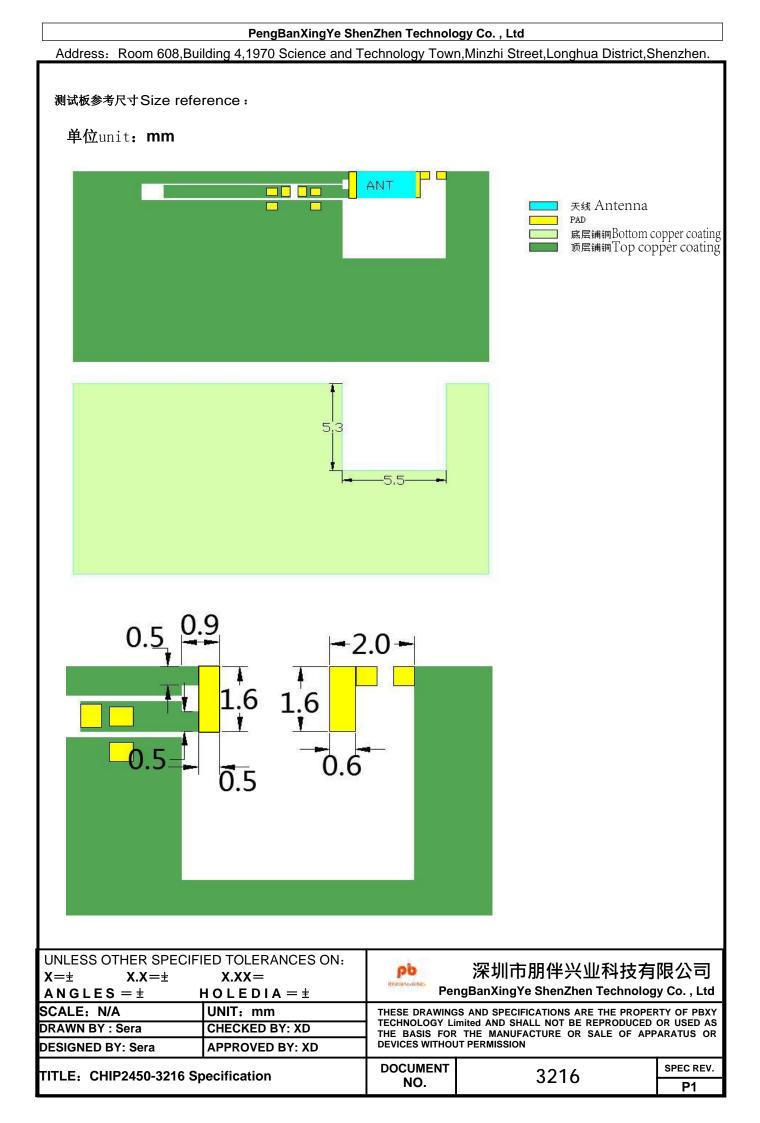


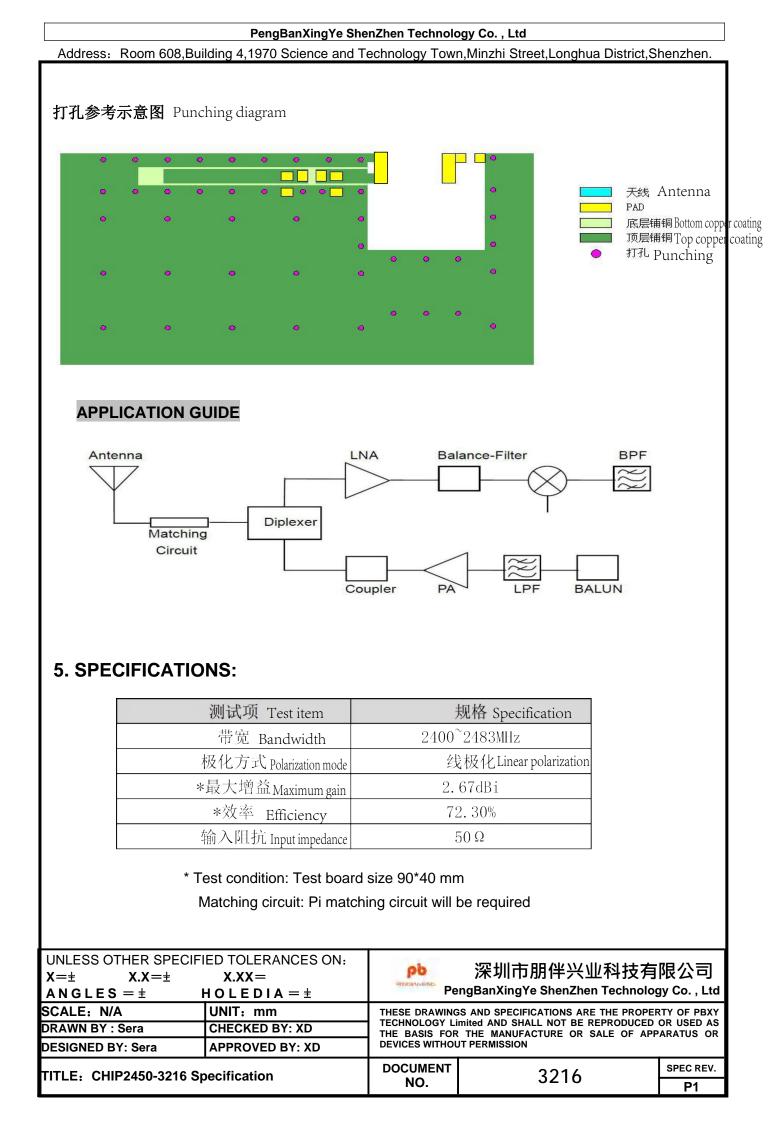
- (1) Product type: Multilayer chip Antenna
- (2) Center Frequency: 2450MHz
- (3) External Dimensions (L×W) (mm): 3.2\*1.6

# 4. SHAPE AND DIMENSIONS:

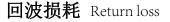


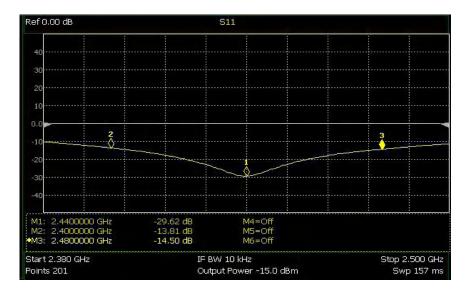
UNLESS OTHER SPECIFIED TOLERANCES ON: X=± X.X=± X.XX= 深圳市朋伴兴业科技有 ANGLES=± HOLEDIA=± PengBanXingYe ShenZhen Technology				
SCALE: N/A	UNIT: mm	THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF PBX TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OF DEVICES WITHOUT PERMISSION		
DRAWN BY : Sera	CHECKED BY: XD			
DESIGNED BY: Sera	APPROVED BY: XD			
TITLE: CHIP2450-3216 Specification		DOCUMENT	3216	SPEC REV.
		NO.	5210	P1



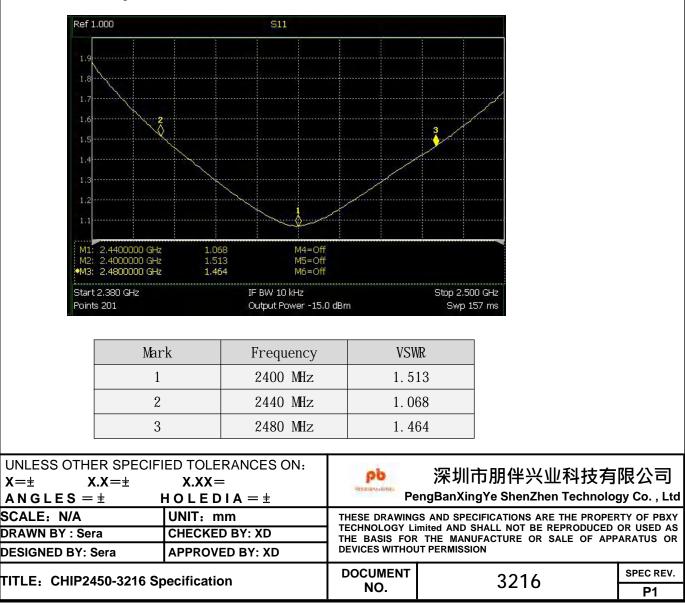






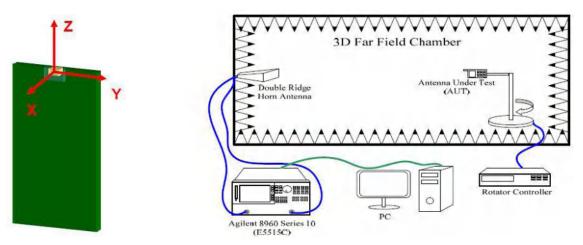


#### 驻波比 Standing-wave ratio



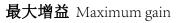
#### **Radiation Pattern**

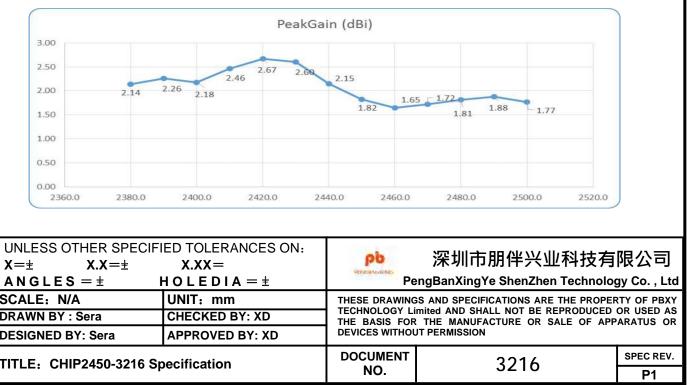
The Gain pattern is measured in FAR-field chamber. DUT is placed on the table of rotator, a standard horn antenna and Vector Network Analyzer is used to collect data.



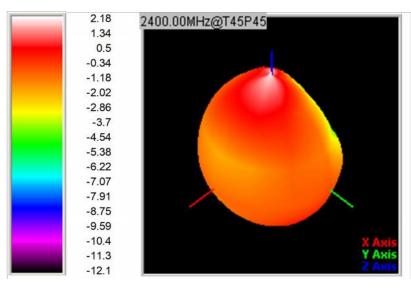
#### ◎ 效率 Efficiency



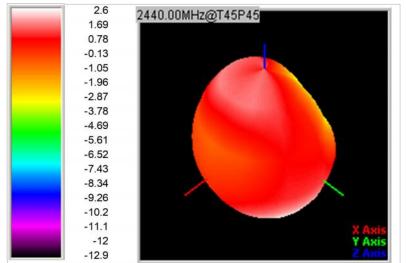




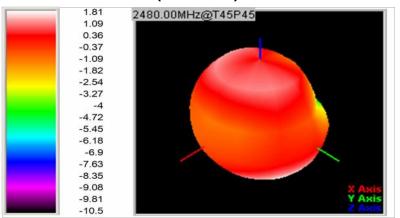
## ◎ 3D Gain Pattern (2400 MHz)



#### O 3D Gain Pattern (2440 MHz)



#### ◎ 3D Gain Pattern (2480 MHz)



UNLESS OTHER SPECIFIED TOLERANCES ON: X=± X.X=± X.XX= ANGLES=± HOLEDIA=± 深圳市朋伴兴业科技有限 PengBanXingYe ShenZhen Technology				
SCALE: N/A UNIT: mm	_	THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF PBX		
DRAWN BY : Sera CHECKED BY: XD		TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OF		
DESIGNED BY: Sera APPROVED BY: XD	DEVICES WITHOU	DEVICES WITHOUT PERMISSION		
TITLE: CHIP2450-3216 Specification	DOCUMENT	3216	SPEC REV.	
	NO.	3210	P1	

## 7. Environmental Characteristics

#### (1) Reliability Test

Item	Condition	Specification
Thermal shock	1. $30\pm 3$ minutes at $-40^{\circ}$ C $\pm 5^{\circ}$ C, 2. Convert to $\pm 105^{\circ}$ C (5 minutes) 3. $30\pm 3$ minutes at $\pm 105^{\circ}$ C $\pm 5^{\circ}$ C, 4. Convert to $-40^{\circ}$ 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: $85\pm5^{\circ}$ C 3. Time: 1000 hours.	No apparent damage Fulfill the electrical spec. after test.
High temperature resistance	1. Temperature: 150° C±5° C 2. Time: 1000 hours.	No apparent damage Fulfill the electrical spec. after test.
Low temperature resistance	1. Temperature: -40° C±5° C 2. Time: 1000 hours.	No apparent damage Fulfill the electrical spec. after test.
Soldering heat resistance	1. Solder bath temperature : 260±5℃ 2. Bathing time: 10±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 $245\pm5$ °C for $3\pm1$ seconds.	No apparent damage

#### (2) Storage Condition

#### (a) At warehouse:

The temperature should be within  $0 \sim 30^{\circ}$ 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  $^\circ\!\!\mathbb{C}$  to +105  $^\circ\!\!\mathbb{C}$  .

			深圳市朋伴兴业科技有 ngBanXingYe ShenZhen Technolog	
SCALE: N/A	UNIT: mm	THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF PBX TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OF		
DRAWN BY : Sera	CHECKED BY: XD			
DESIGNED BY: Sera	APPROVED BY: XD	DEVICES WITHOUT PERMISSION		
TITLE: CHIP2450-3216 Specification		DOCUMENT 3216		SPEC REV.
		NO.	5210	P1

### 8. Recommended Reflow Soldering **Temperature of termination** Time The normal to Preheating 1<sup>st</sup> rising temperature 30s to 60s A temperature 140°C to 160°C В Preheating 60s to 120s 2<sup>nd</sup> rising temperature Preheating to 200°C C 20s to 40s if 220°C 50s~60s if 230°C 40s~50s 30s~40s if 240°C D Main heating if 250°C 20s~40s 20s~40s if 260°C

\*reference: J-STD-020C

Regular cooling

Е

#### (1) Soldering Gun Procedure

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

200°C to 100°C

(a) The tip temperature must be less than 350° C for the period within 3 seconds by using soldering gun under 30 W.

1°C/s ~ 4°C/s

(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.

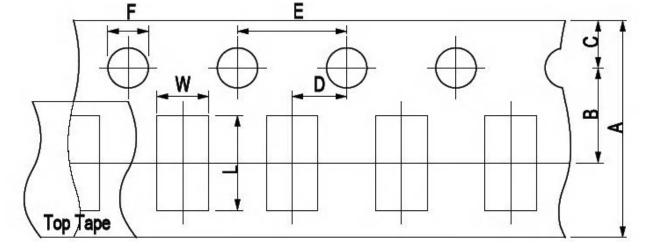
UNLESS OTHER SPECIF $X=\pm$ $X.X=\pm$ ANGLES = $\pm$	IED TOLERANCES ON: X.XX= HOLEDIA=±	PengBanXingYe ShenZhen Technology Co., Lt		
SCALE: N/A	UNIT: mm	THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF PBX TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED A THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS O		
DRAWN BY : Sera	CHECKED BY: XD			
DESIGNED BY: Sera	APPROVED BY: XD	DEVICES WITHOUT PERMISSION		
TITLE: CHIP2450-3216 Specification		DOCUMENT	3216	SPEC REV.
		NO.	5210	P1

#### PengBanXingYe ShenZhen Technology Co. , Ltd

Address: Room 608, Building 4, 1970 Science and Technology Town, Minzhi Street, Longhua District, Shenzhen.

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

- (1) Quantity/Reel: 5000pcs/Reel
- (2) Carrier tape dimensions



Туре	А	В	С	D	E	F	L	W
2450-21	8.00±0.3	$3.50 \pm 0.05$	1.75 $\pm$ 0.1	$2.00 \pm 0.05$	4.00 $\pm$ 0.1	$1.50 \pm 0.1$	2.30 $\pm$ 0.1	$1.55 \pm 0.1$

#### (3) Taping reel dimensions

