# 产品规格承认书

# **SPECIFICATIONS**

客户:								
CUSTOMER: _								
产品名称:								
DESCRIPTION	:	Bi	polar ar	<u>ten</u>	na			
客户型号:								
CUSTOMER PA	RT No:_							
产品型号:	•			400				
OUR MODEL N 日期:	0:		PBX3216M	<u>AU3</u>				
Д <del>уд</del> : DATE:								
DITL								
确认签字,盖章	后请返回	承认书-	一份					
PLEASE RETU	RN TO US	S ONE CO	PY OF "S	SPEC	IFICA	TION FOR AP	PROVA	L <b>"</b>
WITH YOUR A	PPROVED	SIGNATU	RES					
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Customer A	cknowle	edges Si	gnature					
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# **PBX3216MA03 Specification**

Operating Temp. : -40 ℃~+85 ℃

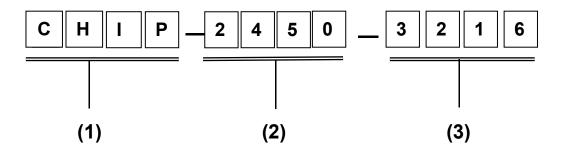
#### 1. FEATURES:

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

#### 2. APPLICATIONS:

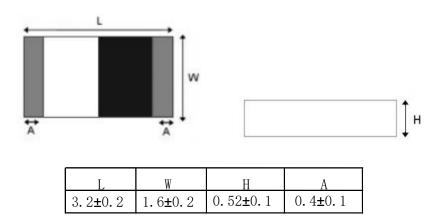
- Bluetooth, Wireless LAN, Mobile TV
- Home RF System, etc

# 3. PRODUCT IDENTIFICATION



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

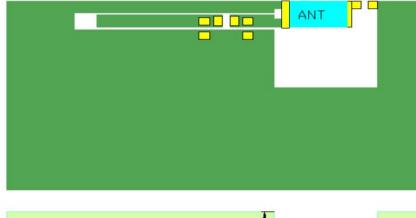
# 4. SHAPE AND DIMENSIONS:

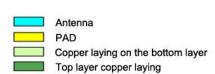


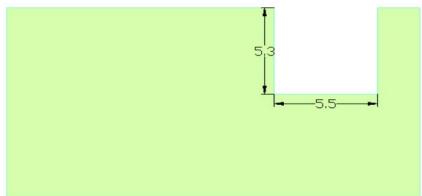
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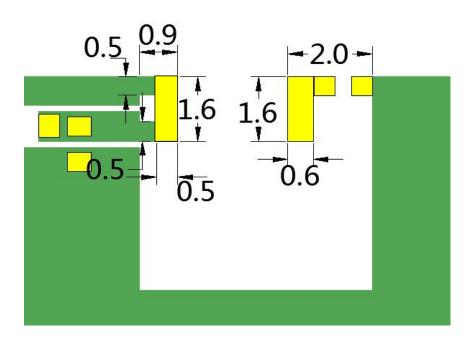
# Test plate reference size:

Company: mm



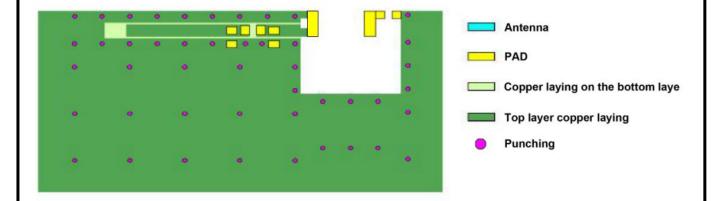




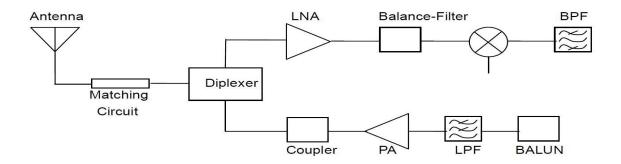


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# Hole punching reference diagram



# **APPLICATION GUIDE**



# 5. SPECIFICATIONS:

Test Item	Specifications	
Bandwidth	2400-2483MHz	
Polarization mode	Linear polarization	
* Maximum gain	2.67dBi	
* Efficiency	72.3%	
Input Impedance	50Ω	

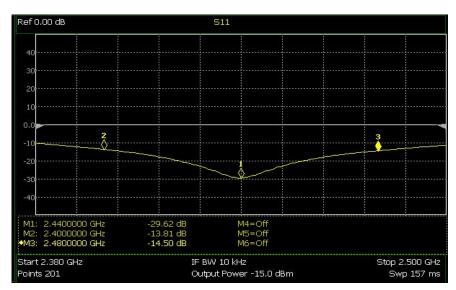
\* Test condition: Test board size 90\*40 mm

Matching circuit: Pi matching circuit will be required

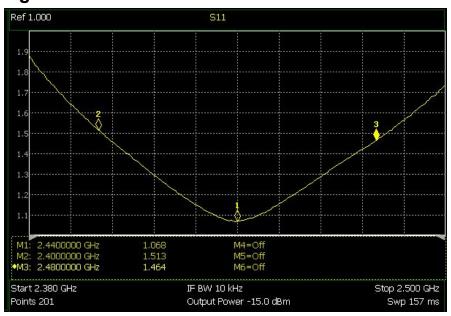
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# 6. Electrical Characteristics:

# **Return loss**



# Standing wave ratio

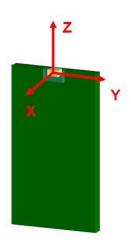


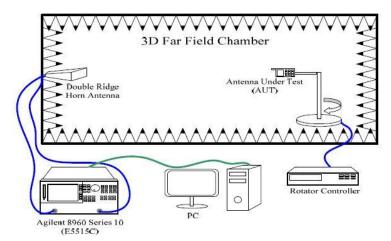
Mark	Frequency	VSWR
1	2400 MHz	1.513
2	2440 MHz	1.068
3	2480 MHz	1.464

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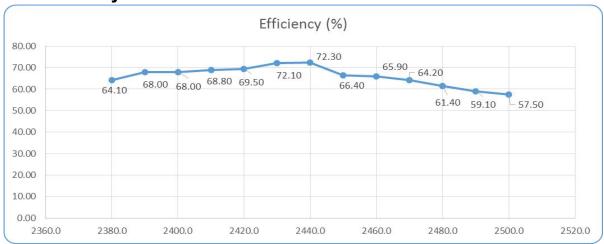
#### **Radiation Pattern**

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.

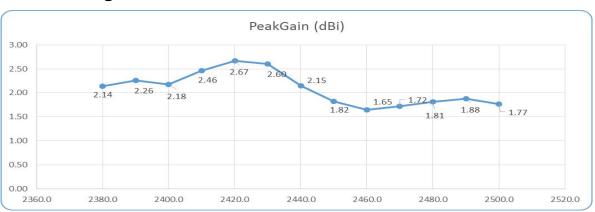




# © Efficiency

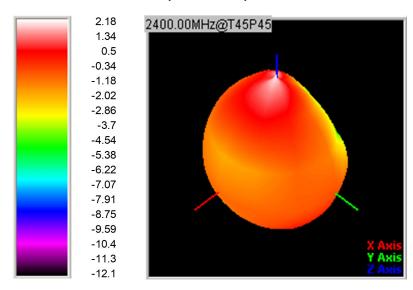


# Maximum gain

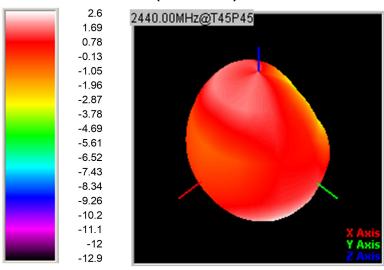


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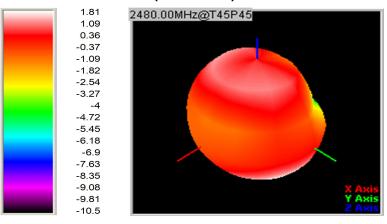
# ○ 3D Gain Pattern (2400 MHz)



# **◎** 3D Gain Pattern (2440 MHz)



# ○ 3D Gain Pattern (2480 MHz)



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#### PengBanXingYe ShenZhen Technology Co. , Ltd

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

# 7. Environmental Characteristics

# (1) Reliability Test

Item	Condition	Specification
Thermal shock	1. 30±3 minutes at -40° C±5° C, 2. Convert to +105° C (5 minutes) 3. 30±3 minutes at +105° C±5° C, 4. Convert to -40° 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 : $260\pm5^{\circ}$ 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 $245\pm5^\circ\!$	No apparent damage

# (2) Storage Condition

#### (a) At warehouse:

The temperature should be within 0 ~ 30°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:

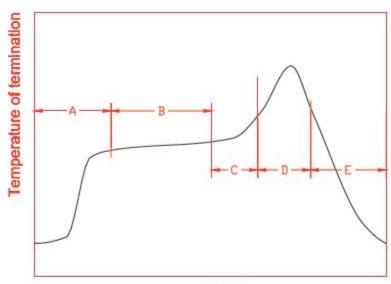
The temperature should be within -40~85°C and humidity should be less than 85% RH.

# (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 M		if 220°C	50s∼60s
		if 230°C	40s~50s
	Main heating	if 240°C	30s~40s
	5-00-00 00 00 00 00 00 00 00 00 00 00 00	if 250°C	20s~40s
		if 260°C	20s~40s
E	Regular cooling	200°C to 100°C	1°C/s ~ 4°C/s
	75050 (0)	AT	277

<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  $350^{\circ}\,$  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

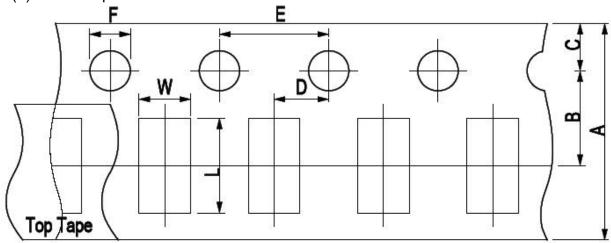
Note that excess of soldering volume will easily get crack the body of this product.

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

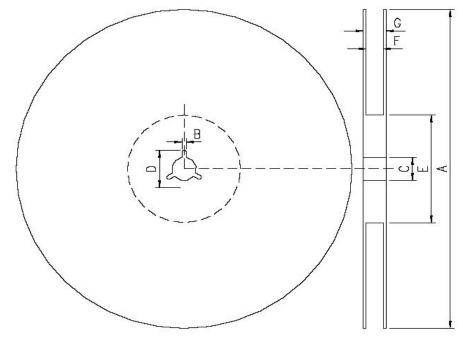
(1) Quantity/Reel: 5000pcs/Reel

(2) Carrier tape dimensions



Type	A	В	С	D	Е	F	L	W
2450-21	$8.00\pm0.3$	$3.50\pm0.05$	1.75 $\pm$ 0.1	$2.00\pm0.05$	$4.00\pm0.1$	$1.50\pm0.1$	$2.30\pm0.1$	$1.55 \pm 0.1$

# (3) Taping reel dimensions



Α	178.0±2.0
В	2.0±0.5
С	13.0±0.5
D	21.0±0.8
Ε	62.0±1.5
F	9.0±0.5
G	13.0±1.0

UNLESS OTHER SPECIFIED	TOLERANCES ON:
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 $X=\pm X.X=\pm X.XX=$ 

 $ANGLES = \pm HOLEDIA = \pm$ 

 SCALE:
 N/A
 UNIT:
 mm

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 CHECKED BY:
 XD

 DESIGNED BY:
 Sera
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