SPECIFICATIONS

客户:	
CUSTOMER:	
产品名称:	
DESCRIPTION:	Bluetooth Antenna
客户型号:	
CUSTOMER PART	No:
产品型号:	
OUR MODEL NO:	PBX3216MC02
日期:	
DATE:	2020/12/22

PLEASE RETURN TO US ONE COPY OF "SPECIFICATION FOR APPROVAL" WITH YOUR APPROVED SIGNATURES

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DESIGNED BY: Sera	APPROVED BY: XD			
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		NO.	JZ10	P1

PBX3216MC02 Specification

Operating Temp. : -40 ℃~+85 ℃

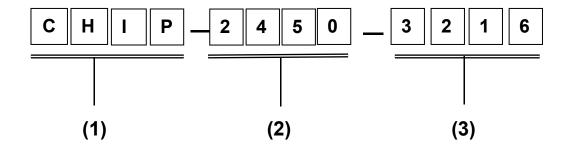
1. FEATURES:

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

2. APPLICATIONS:

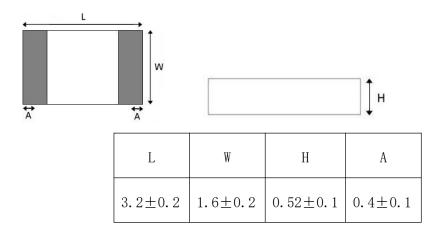
- Bluetooth, Wireless LAN, Mobile TV
- Home RF System, etc

3. PRODUCT IDENTIFICATION



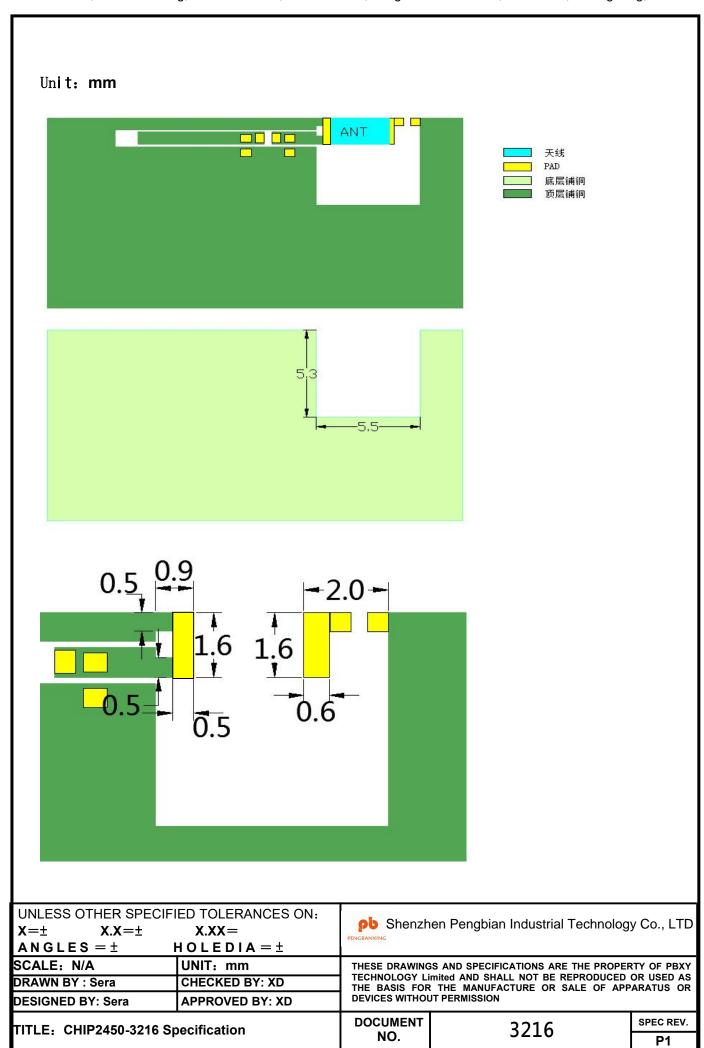
- (1) Product type: Multilayer chip Antenna
- (2) Center Frequency: 2450MHz
- (3) External Dimensions (L×W) (mm): 3.2*1.6

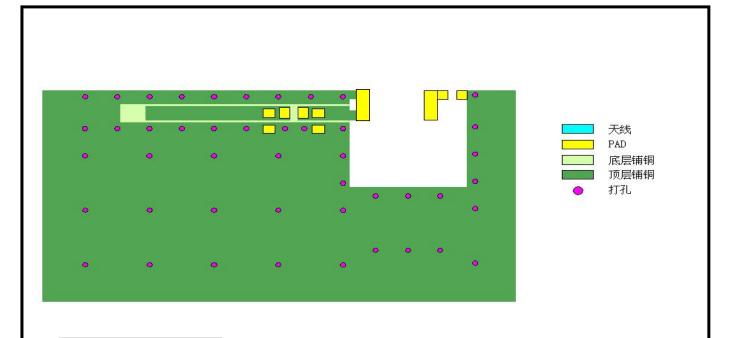
4. SHAPE AND DIMENSIONS:



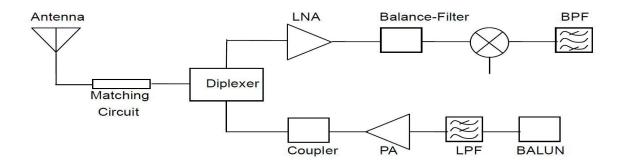
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Room 1016, Mintai Building, Minzhi Avenue, Minzhi Street, Longhua New District, Shenzhen, Guangdong, China





APPLICATION GUIDE



5. SPECIFICATIONS:

Test item	Speci fi cations		
Bandwi dth	2400-2483. 5MHz		
Pol ar	line polar		
Peak dBi	2. 67dBi		
Efficient	72.3%		
Ohm	50		

* Test condition: Test board size 90*40 mm Matching circuit: Pi matching circuit will be required

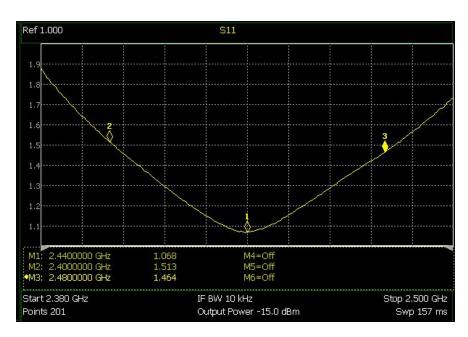
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6. Electrical Characteristics:

RL (return loss)



SWR

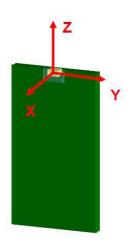


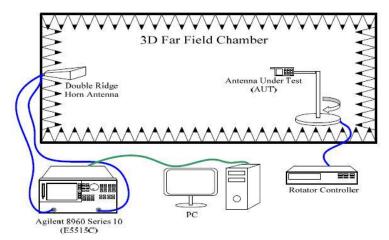
Mark	Frequency	VSWR
1	2400 MHz	1.513
2	2440 MHz	1.068
3	2480 MHz	1.464

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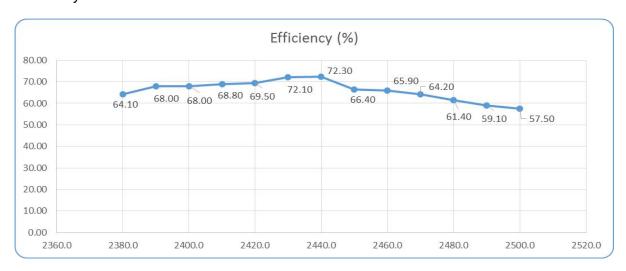
Radiation Pattern

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

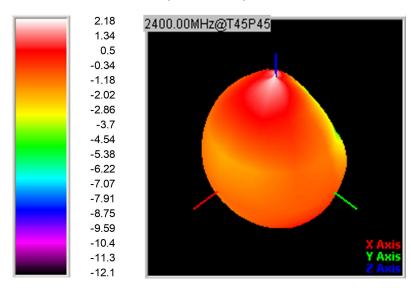


PeakGain

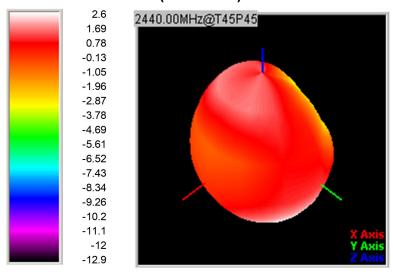


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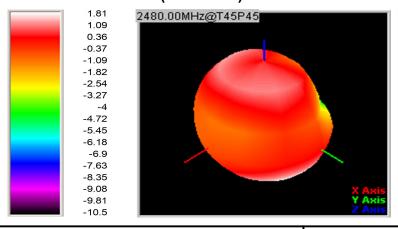
3D Gain Pattern (2400 MHz)



O 3D Gain Pattern (2440 MHz)



3D Gain Pattern (2480 MHz)



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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 $\pm 5^{\circ}$ C 2. Time: 1000 hours.	No apparent damage Fulfill the electrical spec. after test.
Soldering heat resistance	1. Solder bath temperature : 260 ± 5 °C 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 $245\pm5^\circ\mathrm{C}$ for 3 ± 1 seconds.	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:

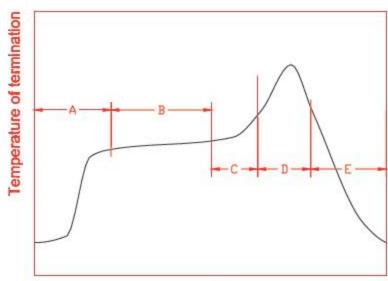
The temperature should be within -40~85°C and humidity should be less than 85% RH.

(3) Operating Temperature Range

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

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8. Recommended Reflow Soldering



Time

		Time	
Α	1 st rising temperature	The normal to Preheating temperature	30s to 60s
В	Preheating	140°C to 160°C	60s to 120s
С	2 nd rising temperature	Preheating to 200°C	20s to 40s
		if 220°C	50s~60s
		if 230°C	40s∼50s
D	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
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^{*}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

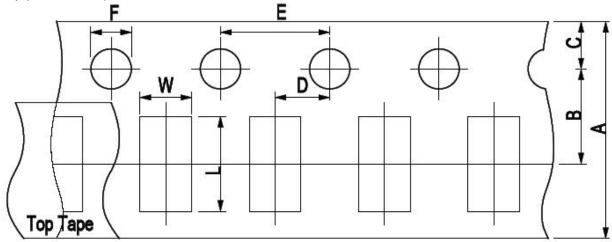
Note that excess of soldering volume will easily get crack the body of this product.

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

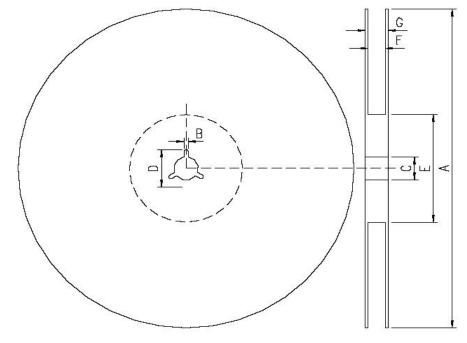
(1) Quantity/Reel: 5000pcs/Reel

(2) Carrier tape dimensions



Type	A	В	С	D	Е	F	L	W
2450-21	8.00 ± 0.3	3.50 ± 0.05	1.75±0.1	2.00 ± 0.05	4.00 ± 0.1	1.50 ± 0.1	2.30 ± 0.1	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

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