# 产品规格承认书

# **SPECIFICATIONS**

客户:					
CUSTOMER:					
产品名称:					
DESCRIPTION:	Cer	amic A	ntenna		
客户型号:					
CUSTOMER PART No:					
产品型号:					
OUR MODEL NO:	<u>Pl</u>	<u> 3X3216</u>	DA01		
日期:					
DATE:					
确认签字,盖章后请返回	承认书一	份			
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TITLE: CHIP2450-3216 Specification		DOCUMENT	3216	SPEC REV.
TITLE: CHIP2450-3216 Specification		NO.	3210	P1

## **PBX3216DA01 Specification**

Operating Temp. : -40 ℃~+85 ℃

#### 1. FEATURES:

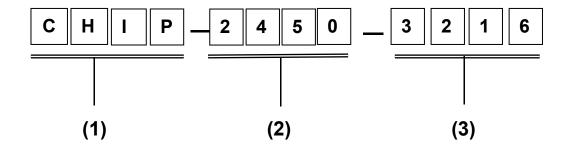
- Light weight, compact
- Wide bandwidth, low cost
- Built-in antenna with high gain

#### 2. APPLICATIONS:

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

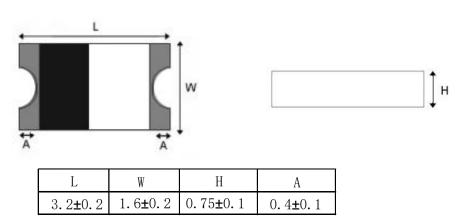
## 3. PRODUCT IDENTIFICATION



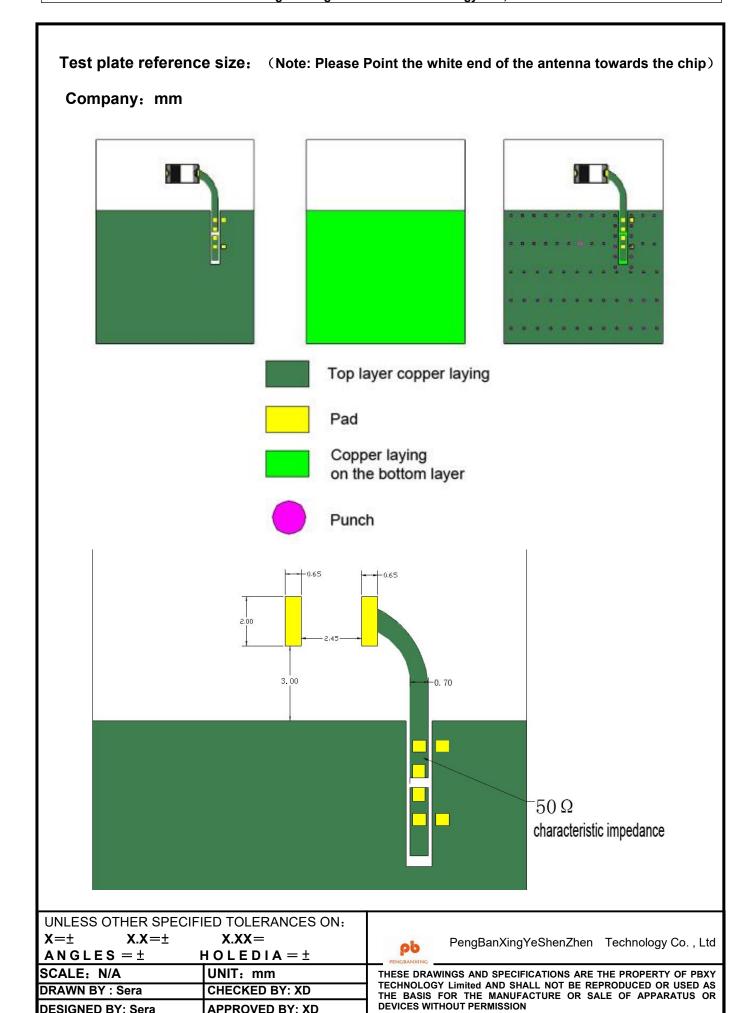


- (1) Product type: Multilayer chip Antenna
- (2) Center Frequency: 2450MHz
- (3) External Dimensions (L×W) (mm): 3.2\*1.6

## 4. SHAPE AND DIMENSIONS:



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**DOCUMENT** NO.

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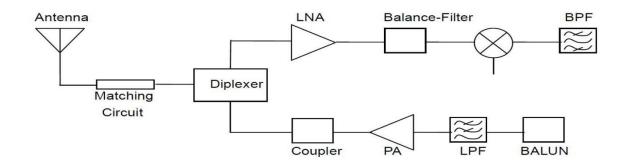
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## **APPLICATION GUIDE**

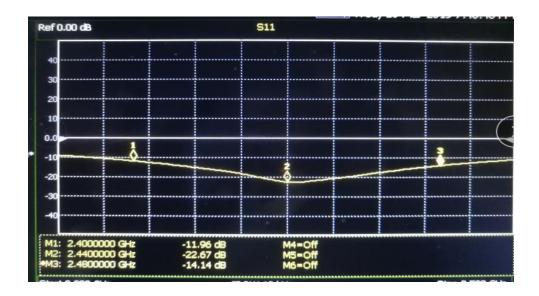


## 5. SPECIFICATIONS:

		1	1
No.	Product number	PBX3216DA01	
1	Central Frequency	2440	MHz
2	Bandwidth	100 (Min.)	MHz
3	Return Loss	-11.96 (Max.)	dB
4	Peak Gain	2.6	dBi
5	Impedance	50	Ω
6	Operating Temperature	-40~+85	°C
7	Maximum Power	5	w
8	Resistance to soldering heat	10 (@260℃)	Sec.
9	Polarization	Linear	
10	Azimuth Beam width	Omni-directional	
11	Termination	Sn (leadless)	

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## **6. Electrical Characteristics:**



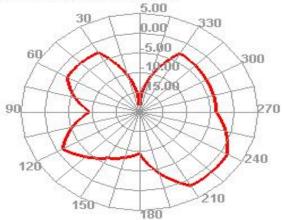


Frequency (MHz)	2400	2450	2500
Avg. Gain (dBi)	-1.83	-1.86	-2.97
Peck Gain (dBi)	2.6	2.58	1.34
Efficiency (%)	65.5	65.22	50.45

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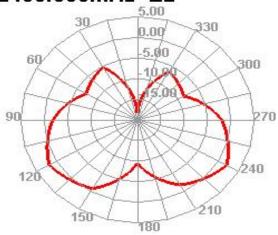
## X-Y Plane



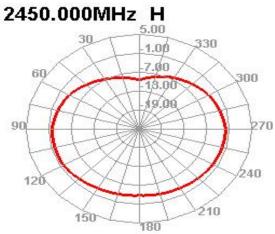


## X-Y Plane

## 2450.000MHz E2

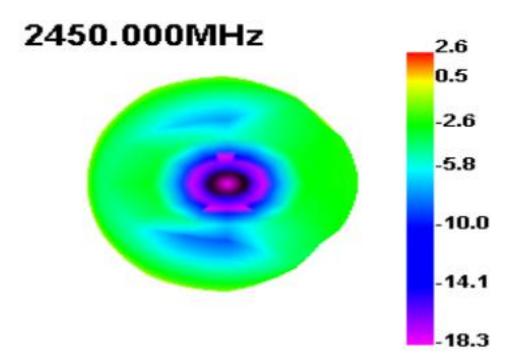


## X-Y Plane



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## **3D Radiation Pattern**



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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: $-40^{\circ}$ 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 : $260\pm5^{\circ}$ 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 $245\pm5^\circ\mathrm{C}$ 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:

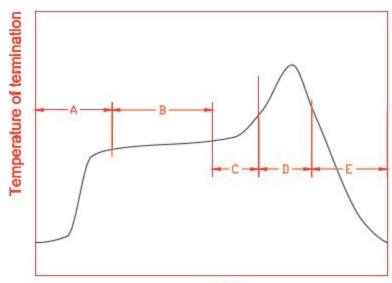
The temperature should be within -40~85°C and humidity should be less than 85% RH.

## (3) Operating Temperature Range

Operating temperature range :  $-40^{\circ}$ 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 Main heating	if 220°C	50s∼60s
		if 230°C	40s~50s
D		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
_	.0030		

<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

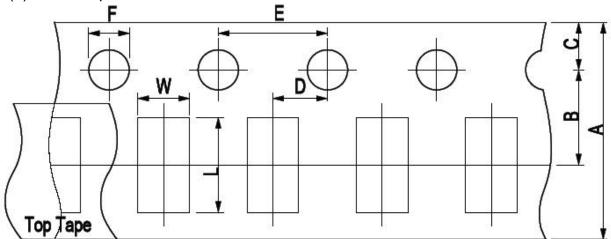
Note that excess of soldering volume will easily get crack the body of this product.

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

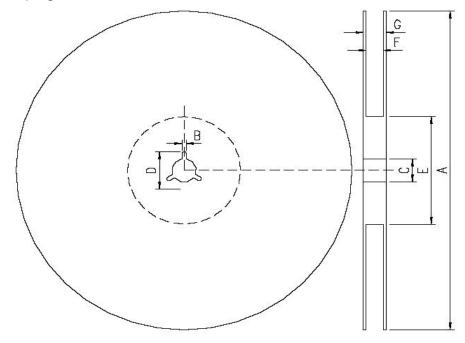
(1) Quantity/Reel: 5000pcs/Reel

(2) Carrier tape dimensions



Type	A	В	С	D	Е	F	L	W
2450-21	$8.00\pm0.3$	$3.50\pm0.05$	$1.75\pm0.1$	$2.00\pm0.05$	$4.00\pm0.1$	1.50 $\pm$ 0.1	$2.30\pm0.1$	1. $55 \pm 0.1$

## (3) Taping reel dimensions



(3)	
Α	178.0±2.0
В	2.0±0.5
C	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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