产品规格承认书

SPECIFICATIONS

	客户:						
	CUSTOMER: _						
	产品名称: DESCRIPTION 客户型号:	:	Mon	opole .	<u>Antenna</u>		
	CUSTOMER PA	RT No:					
	产品型号: OUR MODEL N	0:		PBX50211	DA01		
	日期:						
	DATE: 认签字, 盖章	后语设 回语		 公			
	PLEASE RETU				PECIFICAT	ION FOR APPE	OVAL"
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DOCUMENT

NO.

SPEC REV.

P1

OF

5021

PAGE

TITLE: CHIP 2450-5021

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

PBX5021DA01 Specification

Operating Temp. : -40 ℃~+85 ℃

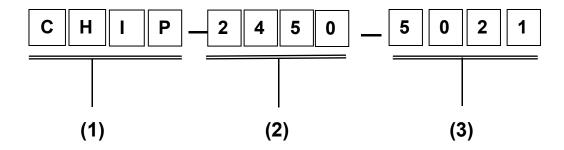
1. FEATURES:

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

2. APPLICATIONS:

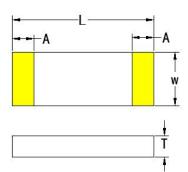
- Bluetooth, Wireless LAN, Mobile TV
- Home RF System, etc

3. PRODUCT IDENTIFICATION



- (1) Product type: Multilayer chip Antenna
- (2) Center Frequency: 2450MHz
- (3) External Dimensions (L×W) (mm): 5.0*2.1

4. SHAPE AND DIMENSIONS:



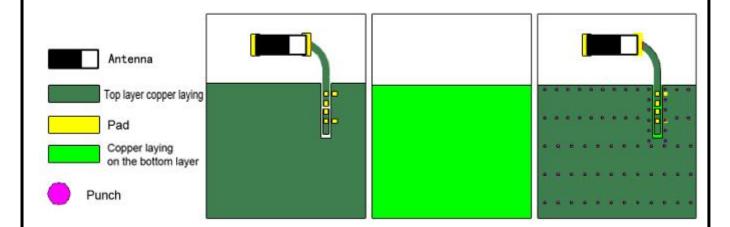
Unit:mm	L	W	A	Т
CHIP-5021	5.0±0.2	2.15±0.2	0.45±0.1	1.15±0.1

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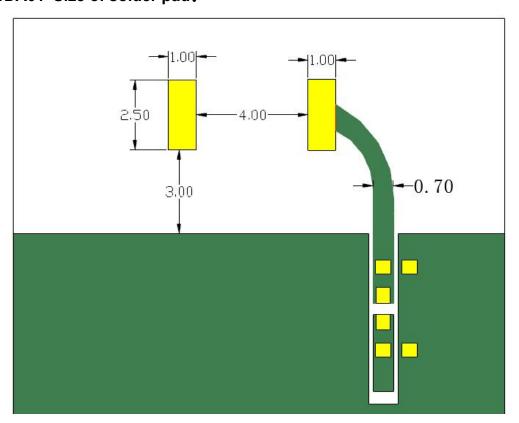
Address: Room 608, Building 4,1970 Science and Technology Town, Minzhi Street, Longhua District, Shenzhen.

Test plate reference size:

Company: mm



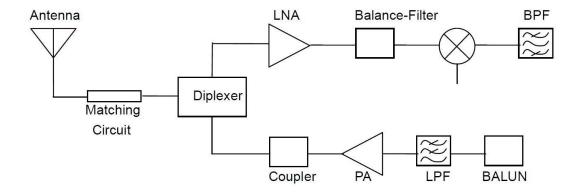
PBX5021DA01 Size of solder pad:



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APPLICATION GUIDE



5. SPECIFICATIONS:

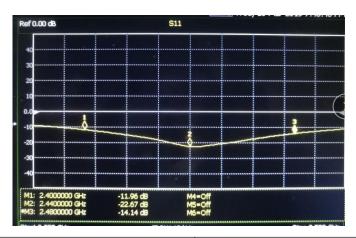
Test Item	Specifications	
Bandwidth	2400-2500MHz	
Polarization mode	Line polarization	
*Maximum gain	2.73dBi	
*Efficiency	67.16%	
Input impedance	50Ω	
Maximum power	5W	

^{*} Test condition: Test board size 86*50 mm

Matching circuit: Pi matching circuit will be required

6. Electrical Characteristics:

Return loss



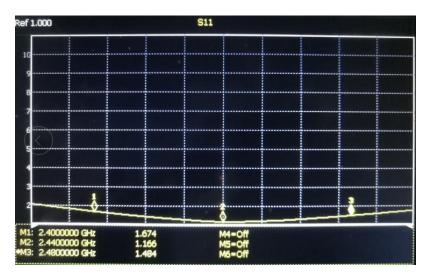
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			PAGE	4 OF	11

PengBanXingYe ShenZhen Technology Co., Ltd

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Standing Wave Ratio



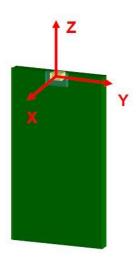
Mark	Frequency	VSWR
1	2400 MHz	1.674
2	2440 MHz	1.166
3	2480 MHz	1.484

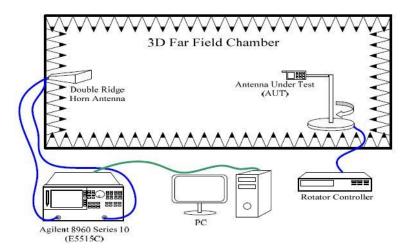
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Address: Room 608, Building 4,1970 Science and Technology Town, Minzhi Street, Longhua District, Shenzhen.

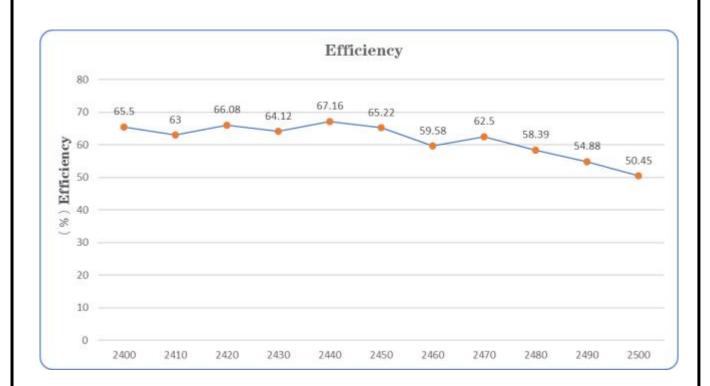
Radiation Pattern

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.





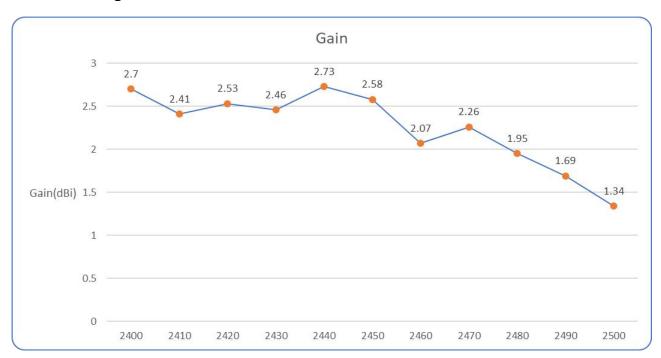
Efficiency



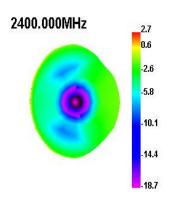
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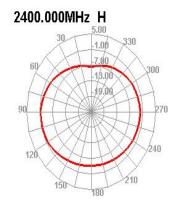
Address: Room 608, Building 4,1970 Science and Technology Town, Minzhi Street, Longhua District, Shenzhen.

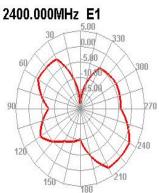
Maximum gain

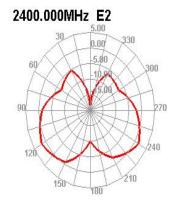


◎ 3D Gain Pattern (2400 MHz)



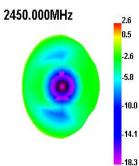


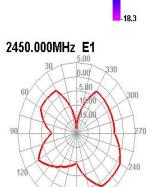




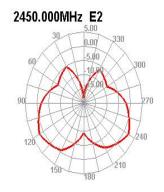
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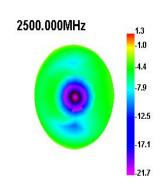
Address: Room 608, Building 4,1970 Science and Technology Town, Minzhi Street, Longhua District, Shenzhen.

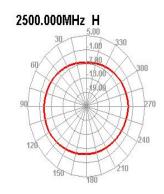


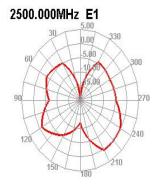


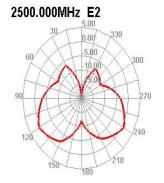
2450.000MHz H 5,00 1,00 30 1,00 18,00 120 120 150 180 240











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7. Environmental Characteristics

(1) Reliability Test

Item	Condition	Specification
Thermal shock	 30±3 minutes at -40° C±5° C, Convert to +105° C (5 minutes) 30±3 minutes at +105° C±5° C, Convert to -40° C (5 minutes) 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 °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 $0 \sim 30^{\circ}$ 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.

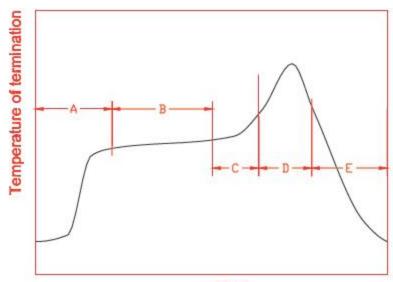
(3) Operating Temperature Range

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

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			PAGE	9	OF	11			

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8. Recommended Reflow Soldering



Time

		111116	
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
		if 250°C	20s~40s
		if 260°C	20s~40s
E	Regular cooling	200°C to 100°C	1°C/s ~ 4°C/s
	75058 30.	AT	

^{*}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

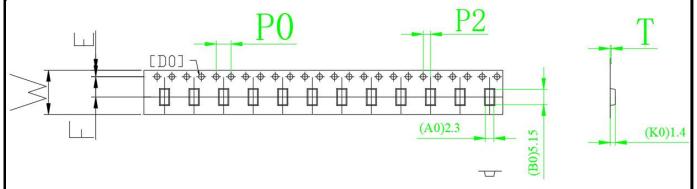
Note that excess of soldering volume will easily get crack the body of this product.

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TITLE: CHIP 2450-5021		NO.	5021		P1			
			PAGE	10 OF	11			

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

(1) Quantity/Reel: 3000pcs/Reel



ITEM	W	A0	В0	K0	K1	P	F	Е	S0	D0	D1	P0	P2	Т
DIM	12.00	2.30	5.15	1.40	0.00	8.00	5.50	1.75	52.40	1.50	0.00	4.00	2.00	0.30

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DESIGNED BY: Sera	APPROVED BY: XL	OR DEVICES WITHOUT PERMISSION						
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