

# GainForce Technology Co.,Ltd

## 嘉光科技股份有限公司

### 承認書

### APPROVAL SHEET

品 名： Antenna

MODEL NAME \_\_\_\_\_

料 號： AT3216-T2R4PAAT/LF

PART NUMBER \_\_\_\_\_

客戶名稱： 永 洋

CUSTOMER 11320Y11141A1 \_\_\_\_\_

供 應 商： GainForce

VENDOR \_\_\_\_\_

使用機種：

MODEL \_\_\_\_\_

聯 絡 人： 尹 廣 汶 \_\_\_\_\_

聯絡電話： (02) 2880-1838 \_\_\_\_\_

附 件：

ACCESSORIES  規格書

SPECIFICATION

樣品

SAMPLE

圖樣

DRAWING

檢驗報告

TEST REPORT

認可狀況：

(APPROVED STATUS)



# AT3216 Series (Preliminary)

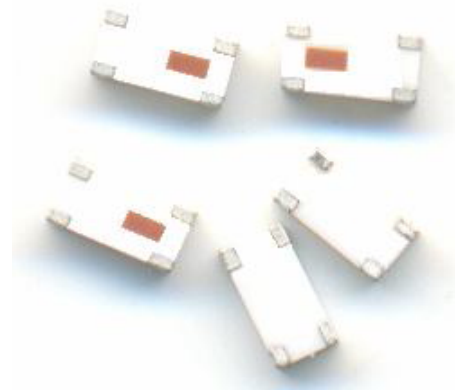
## Multilayer Chip Antenna

### Features

- ❖ Monolithic SMD with small, low-profile and light-weight type.
- ❖ Wide bandwidth

### Applications

- ❖ Bluetooth/Wireless LAN/Home RF
- ❖ ISM band 2.4GHz applications



### Specifications

Part Number	Frequency Range (MHz)	Peak Gain (XZ-total)	Average Gain (XZ-total)	VSWR	Impedance
AT3216-T2R4PAA_	2400 ~ 2500	1.5 dBi typ.	-1.0 dBi typ.	3.0 max.	50 Ω

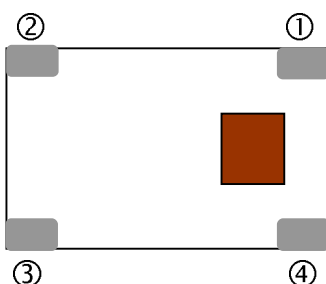
Q'ty/Reel (pcs) : 3,000pcs  
 Operating Temperature Range : -40 ~ +85 °C  
 Storage Temperature Range : +5 ~ +35 °C, Humidity 45~75%RH  
 Storage Period : 12 months max.  
 Power Capacity : 2W max.

### Part Number

AT   3216   -   T   2R4   PAA   □   □  
 ①   ②   ③   ④   ⑤   ⑥   ⑦

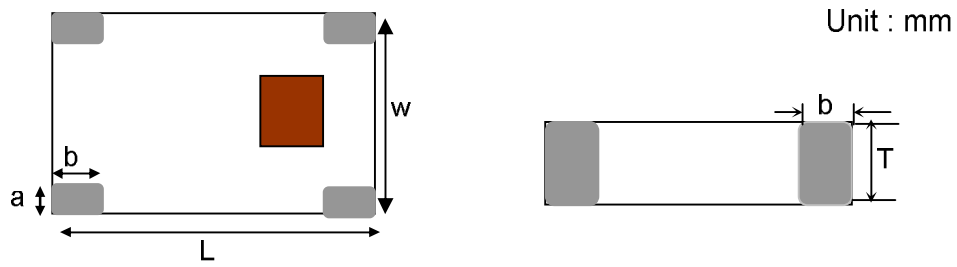
① Type	AT : Antenna	② Dimensions ( L × W )	3.2× 1.6 mm
③ Material Code	T	④ Frequency Range	2R4=2400MHz
⑤ Specification Code	PAA	⑥ Packaging	T: Tape & Reel B: Bulk
⑦ Soldering	=lead-containing /LF=lead-free		

### Terminal Configuration



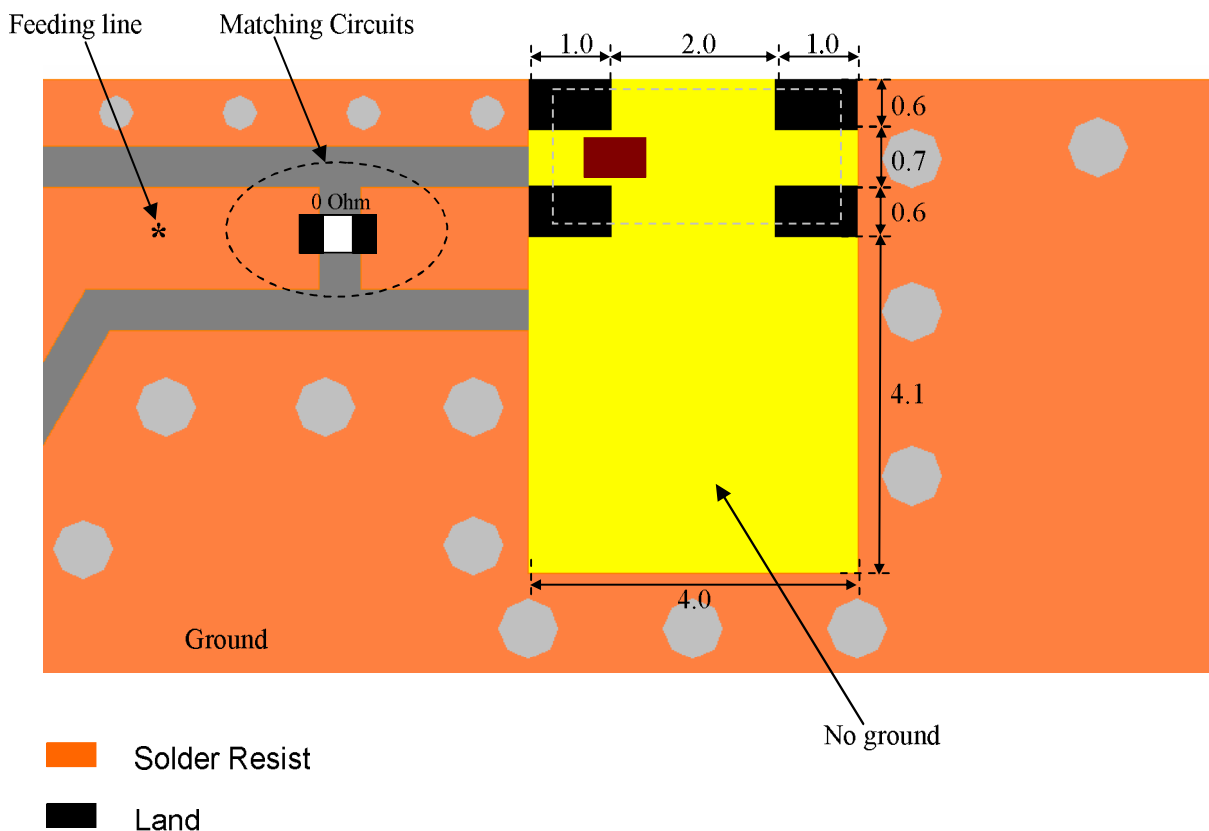
No.	Terminal Name	No.	Terminal Name
①	Feeding Point	②	GND
③	GND	④	GND

**Dimensions and Recommended PC Board Pattern**



Mark	L	W	T	a	b
Dimensions	3.2±0.2	1.6±0.2	1.2±0.2	0.3+0.1 /-0.2	0.5±0.2

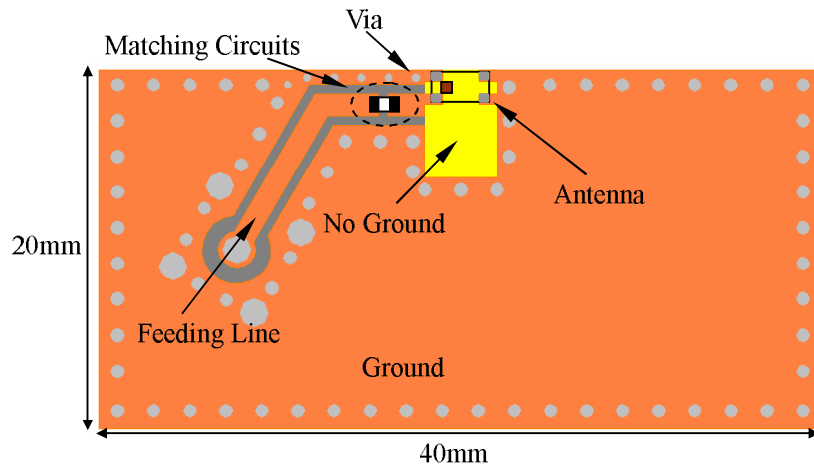
❖Without Matching Circuits - Unit in mm



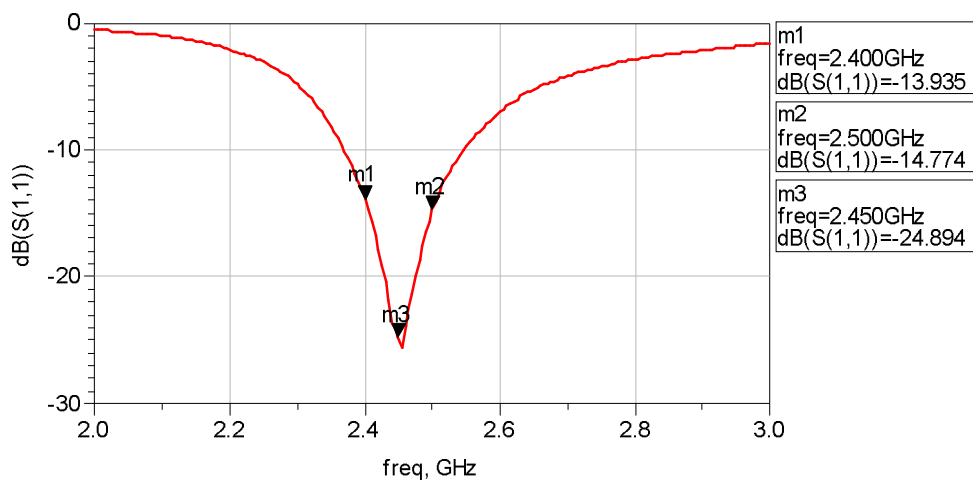
\*Line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.

Typical Electrical Characteristics (T=25°C)

❖ Test Board

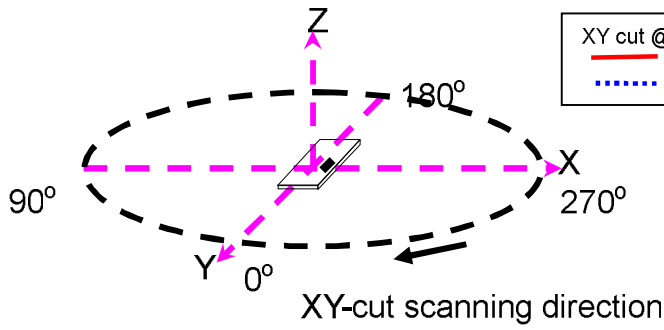


❖ Return Loss-without matching circuits

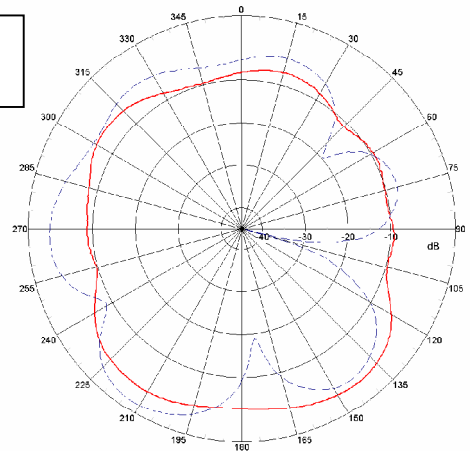


❖ Radiation Patterns

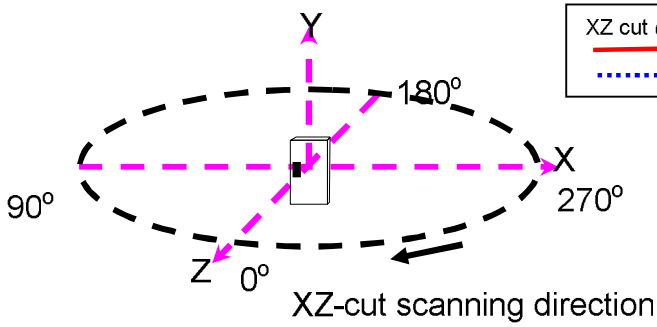
XY-V/XY-H



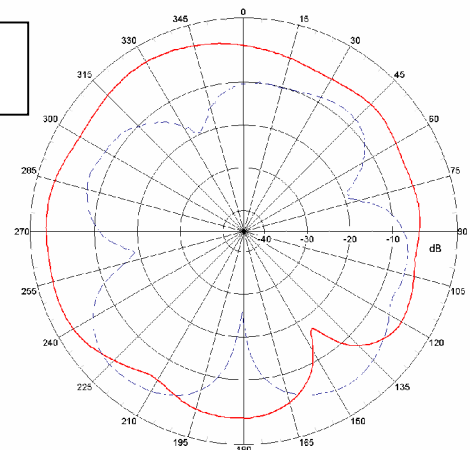
XY cut @ 2.45GHz  
— Vertical  
⋯ Horizontal



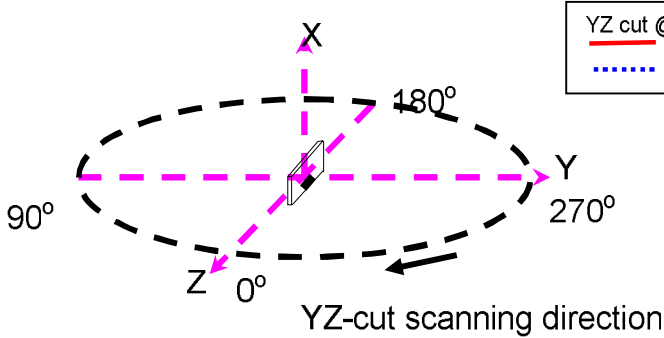
XZ-V/XZ-H



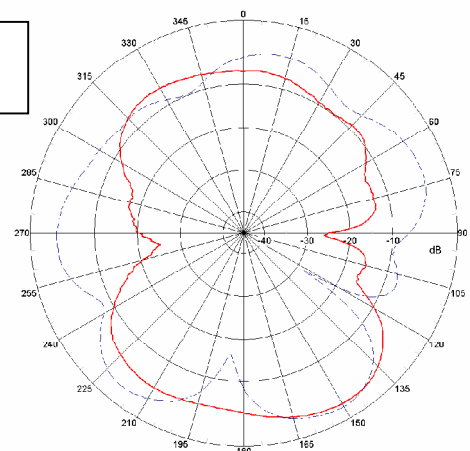
XZ cut @ 2.45GHz  
— Vertical  
⋯ Horizontal



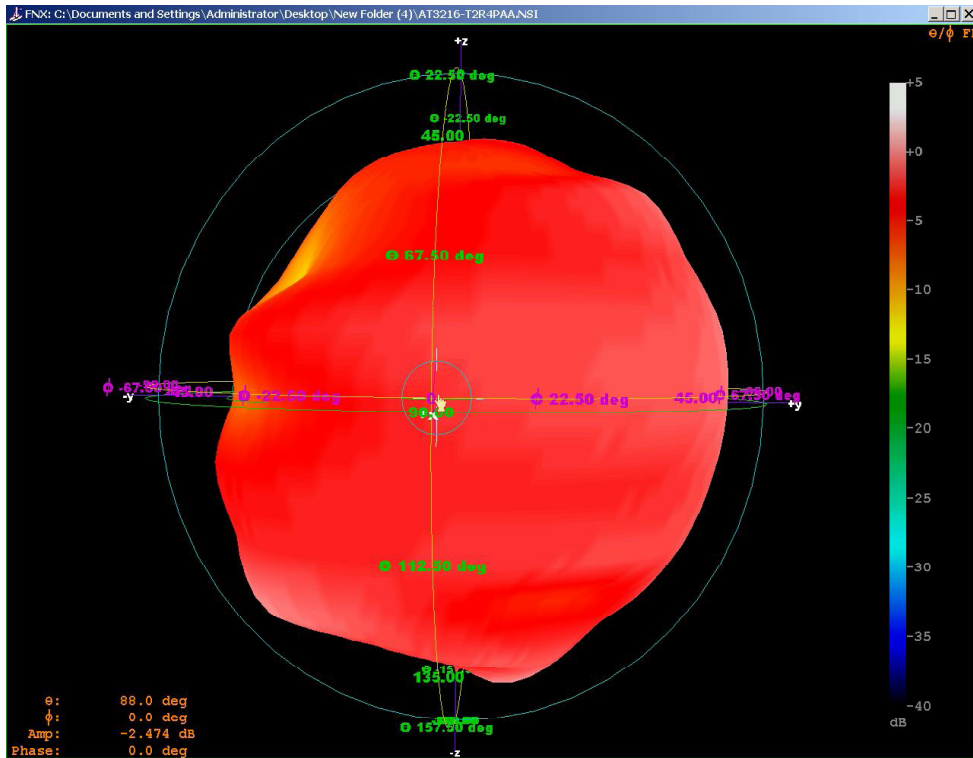
YZ-V/YZ-H



YZ cut @ 2.45GHz  
— Vertical  
⋯ Horizontal



❖ Radiation Patterns - 3D Pattern



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