

# AT3216 Series

## Multilayer Chip Antenna

### Features

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

### Applications

- ❖ 5~6GHz wireless communication system



### Specifications

| Part Number            | Frequency Range (MHz) | Peak Gain (XZ-V) | Average Gain (XZ-V) | VSWR   | Impedance |
|------------------------|-----------------------|------------------|---------------------|--------|-----------|
| <b>AT3216-B5R5HAA_</b> | 5150~5875             | 2.0 dBi typ.     | -2.5 dBi typ.       | 2 max. | 50 Ω      |

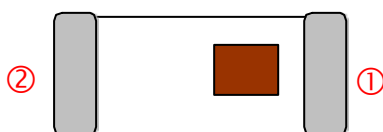
Q' ty/Reel (pcs) : 3,000 pcs  
 Operating Temperature Range : -40 ~ +85 °C  
 Storage Temperature Range : -40 ~ +85 °C  
 Power Capacity : 500mW max.

### Part Number

**AT** **3216** - **B** **5R5** **HAA** **□**  
 ① ② ③ ④ ⑤ ⑥

|                      |              |                        |                           |
|----------------------|--------------|------------------------|---------------------------|
| ① Type               | AT : Antenna | ② Dimensions ( L x W ) | 3.2x 1.6 mm               |
| ③ Material Code      | B            | ④ Frequency Range      | 5R5=5500MHz               |
| ⑤ Specification Code | HAA          | ⑥ Packaging            | T: Tape & Reel<br>B: Bulk |

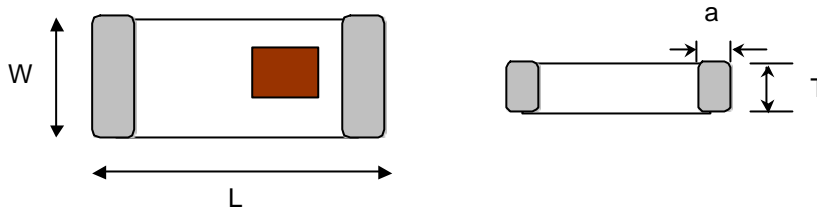
### Terminal Configuration



| No. | Terminal Name | No. | Terminal Name |
|-----|---------------|-----|---------------|
| ①   | Feeding Point | ②   | NC            |

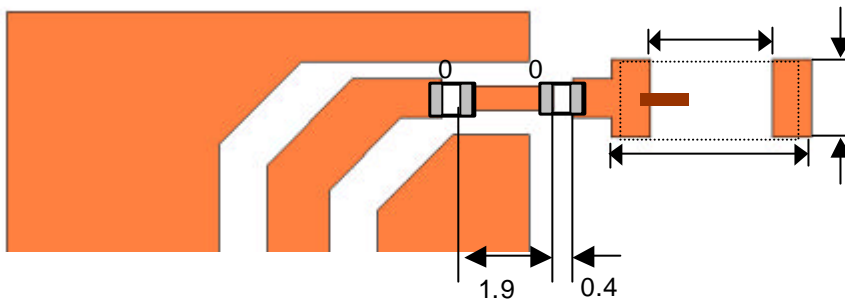
**Dimensions and Recommended PC Board Pattern**

Unit : mm

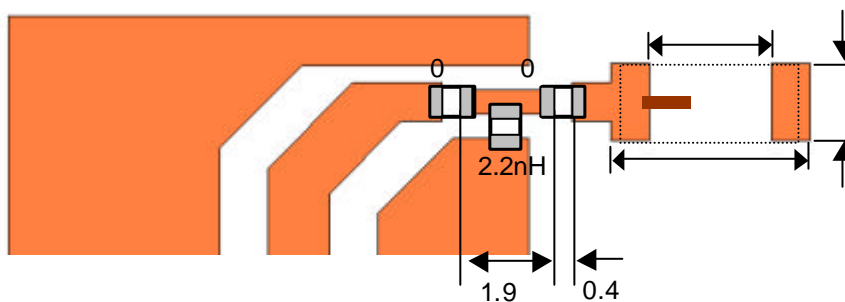


| Mark       | L             | W             | T                  | a             |
|------------|---------------|---------------|--------------------|---------------|
| Dimensions | $3.2 \pm 0.2$ | $1.6 \pm 0.2$ | $1.3 + 0.1 / -0.2$ | $0.5 \pm 0.3$ |

(a) Without Matching Circuits



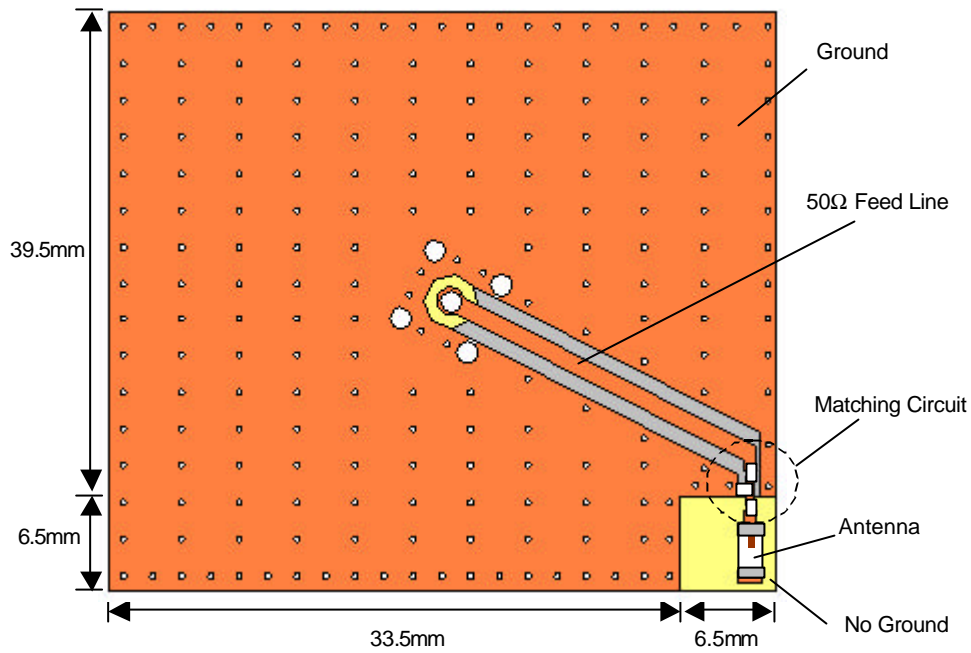
(b) With Matching Circuits



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

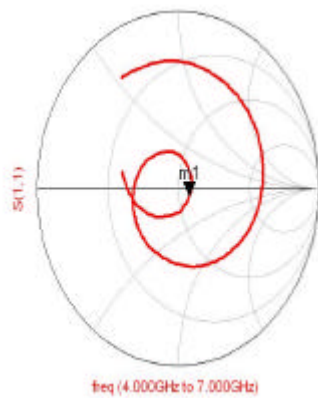
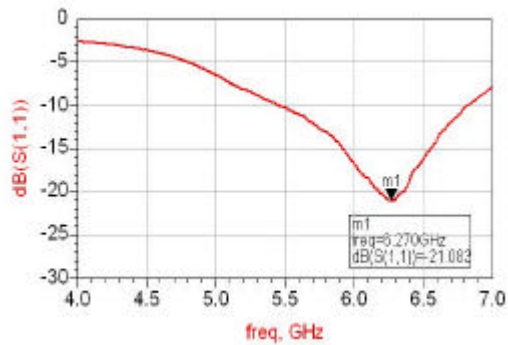
**Typical Electrical Characteristics (T=25°C)**

❖ Test Board

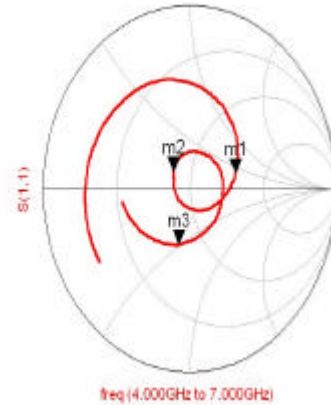
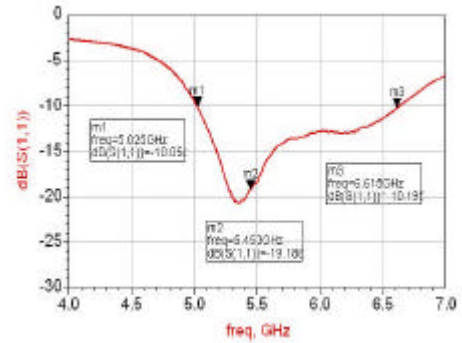


❖ Return Loss

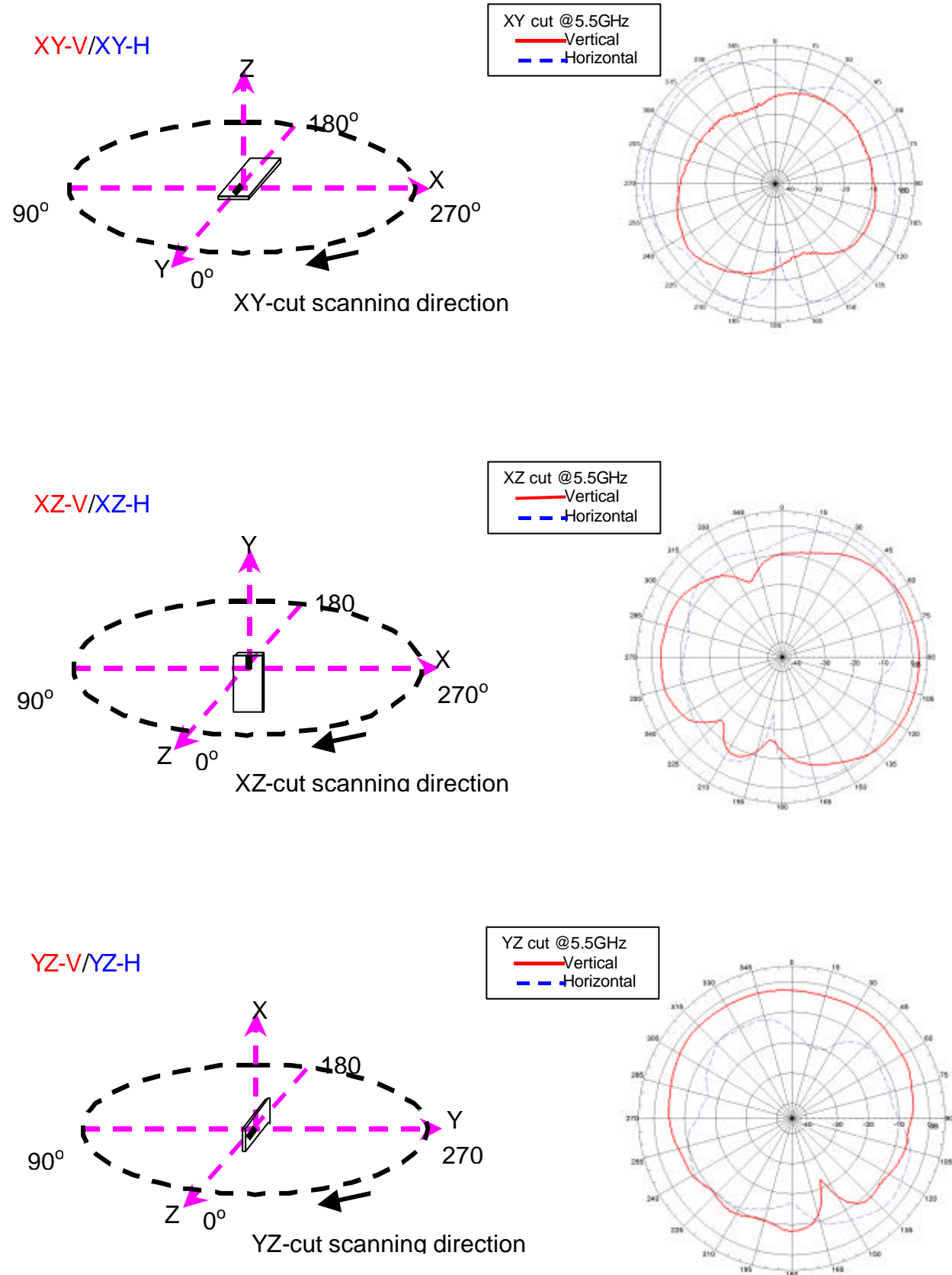
(a) Without Matching Circuits



(b) With Matching Circuits



Radiation Patterns



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