

AT3216 Series

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-V) | Average Gain (XZ-V) | VSWR | Impedance |
|-----------------------------------|-----------------------|------------------|---------------------|--------|-----------|
| AT3216 -B2R7HAA_ | 2400 ~ 2500 | 0.5 dBi typ. | -0.5 dBi typ. | 2 max. | 50 Ω |

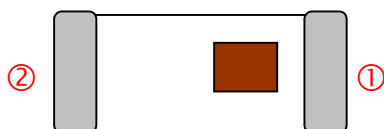
Q'ty/Reel (pcs) : 3,000pcs
 Operating Temperature Range : -40 ~ +85 °C
 Storage Temperature Range : -40 ~ +85 °C
 Power Capacity : 3W max.

Part Number

AT 3216 - B 2R7 HAA □ □
 ① ② ③ ④ ⑤ ⑥ ⑦

| | | | |
|----------------------|-----------------------------------|------------------------|---------------------------|
| ① Type | AT : Antenna | ② Dimensions (L x W) | 3.2x 1.6 mm |
| ③ Material Code | B | ④ Frequency Range | 2R7=2700MHz |
| ⑤ Specification Code | HAA | ⑥ Packaging | T: Tape & Reel B: Bulk |
| ⑦ Soldering | =lead-containing /LF=lead-free | | |

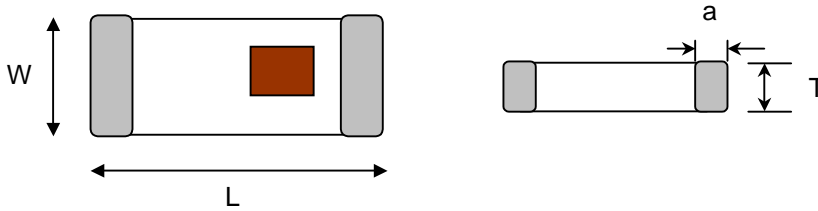
Terminal Configuration



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

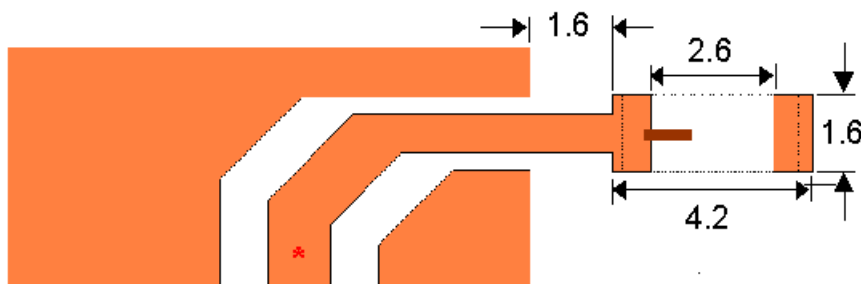
Dimensions and Recommended PC Board Pattern

Unit : mm

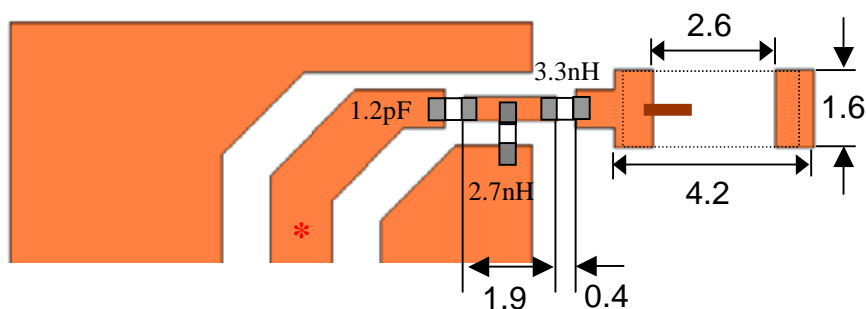


| Mark | L | W | T | a |
|------------|---------|---------|------------------|---------|
| Dimensions | 3.2±0.2 | 1.6±0.2 | 1.3+ 0.1/-0.2 | 0.5±0.3 |

(a) Without Matching Circuits



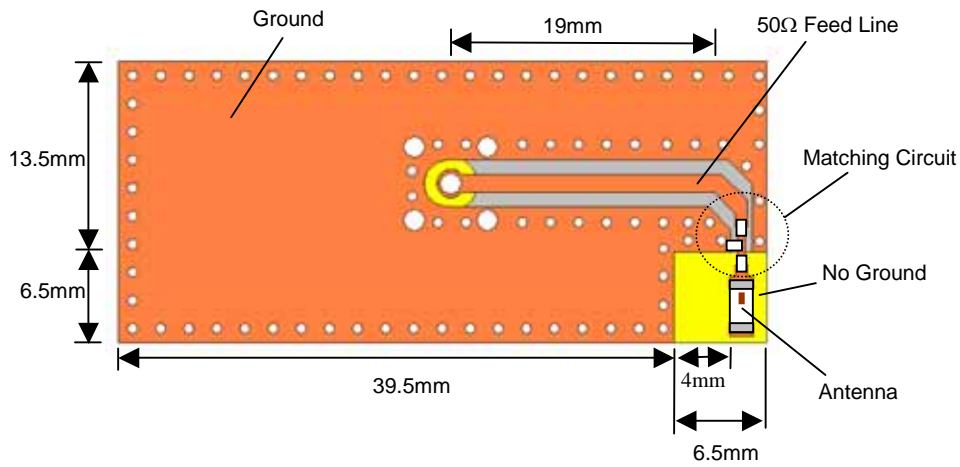
(b) With Matching Circuits



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

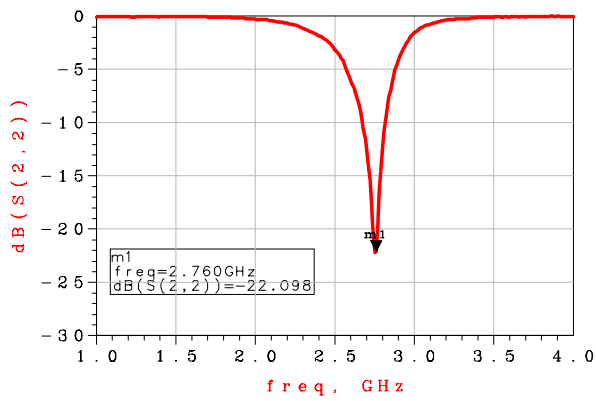
Typical Electrical Characteristics (T=25°C)

❖ Test Board

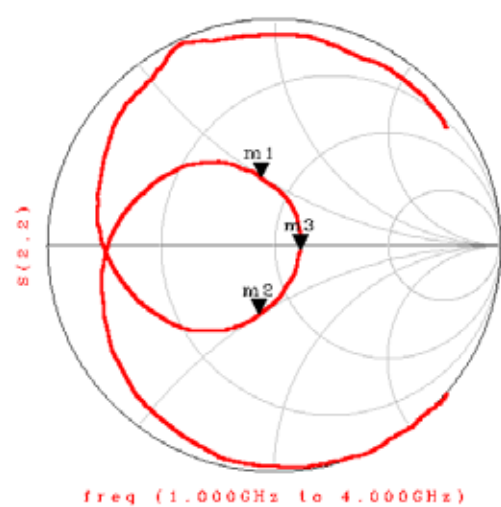
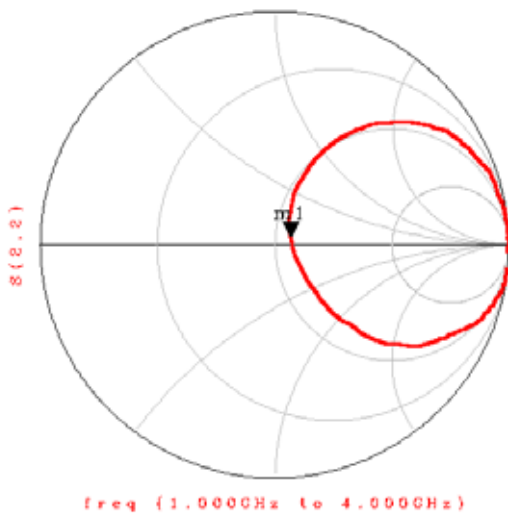
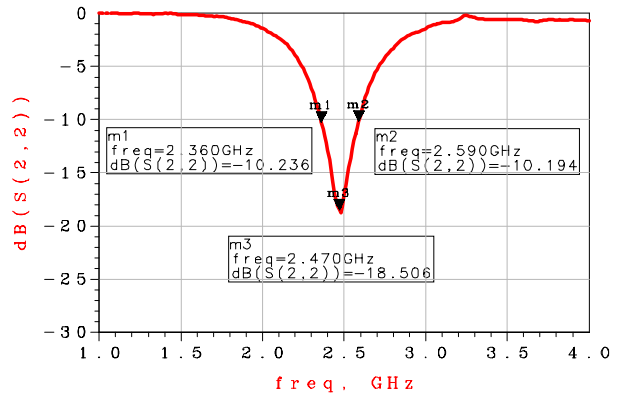


❖ Return Loss

(a) Without Matching Circuits

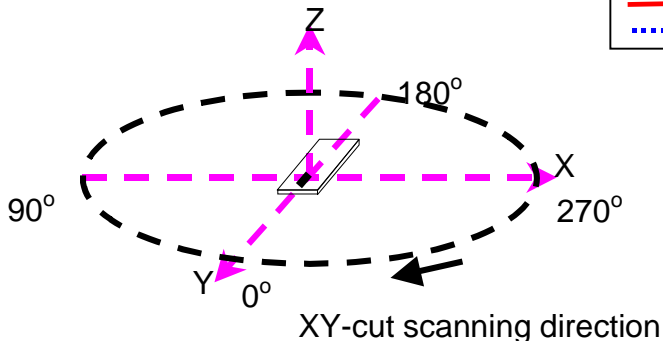


(b) With Matching Circuits

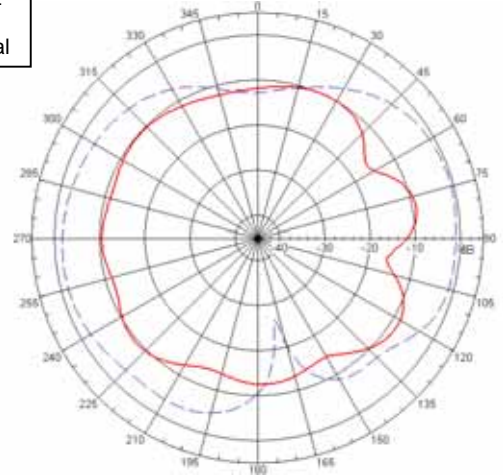


Radiation Patterns

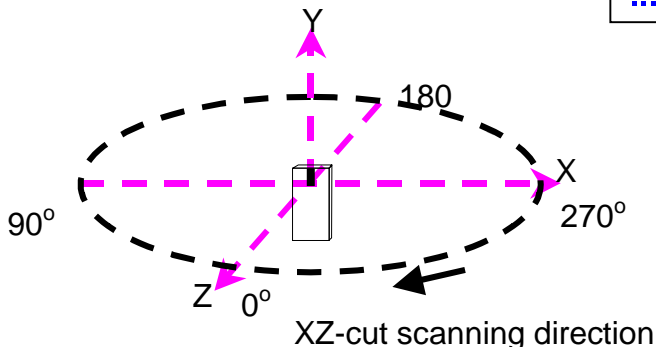
XY-V/XY-H



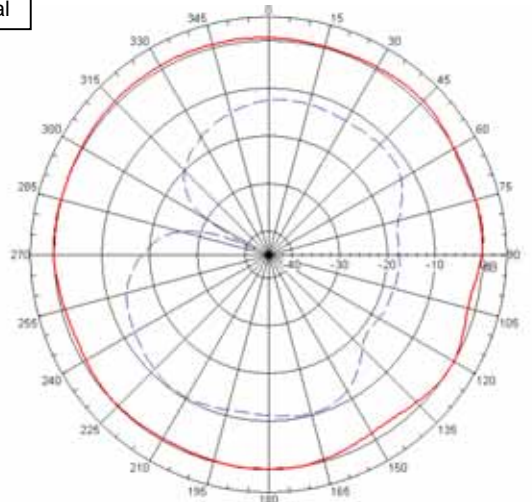
XY cut @2.45GHz
— Vertical
⋯ Horizontal



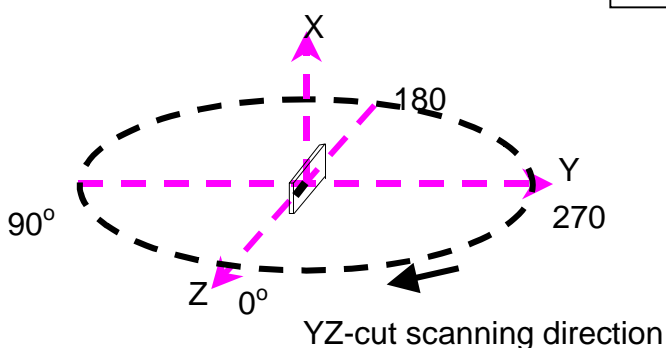
XZ-V/XZ-H



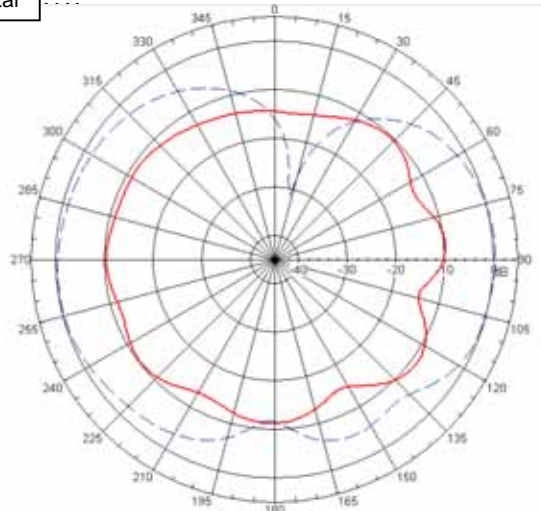
XZ cut @2.45GHz
— Vertical
⋯ Horizontal



YZ-V/YZ-H



YZ cut @2.45GHz
— Vertical
⋯ Horizontal



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