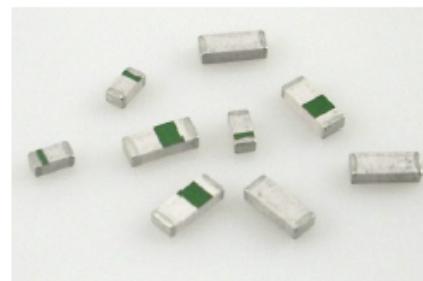


## Multilayer Chip Antenna

### FEATURES

- Low return loss and material loss.
- High radiation efficiency, high gain in radiation pattern.
- Multilayer monolithic structure yields high reliability.



### APPLICATIONS

- Bluetooth; WLAN; 0.8 GHz~6 GHz GSM / DCS / PCS
- Bluetooth module, WLAN module. 0.8GHz~6 GHz communication system including GSM / DCS / PCS cellphone etc.

### Product Identification

MGMA 5220 H 2450 - A01  
 ① ② ③ ④ ⑤

- ① Series name
- ② Dimension L×W: 【5220: 5.2mm×2.0mm; 3216: 3.2mm×1.6mm】
- ③ Structure series
- ④ center frequency: 2450MHz
- ⑤ Antenna type

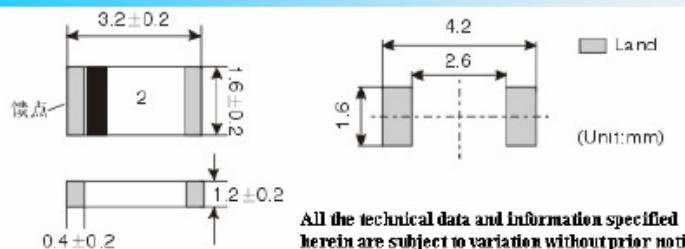
### Product Specification Summary

| Part No           | Dimensions<br>L×W(mm) | Center<br>Frequency<br>f <sub>0</sub><br>(MHz) | Bandwidth<br>(MHz) | Gain    |
|-------------------|-----------------------|--|--------------------|---------|
| MGMA3216H2450-A02 | 3.2×1.6               | 2450 MHz                                       | f <sub>0</sub> ±50 | 0~2 dBi |

## Multilayer Chip Antenna

Part No: MGMA3216H2450-A02

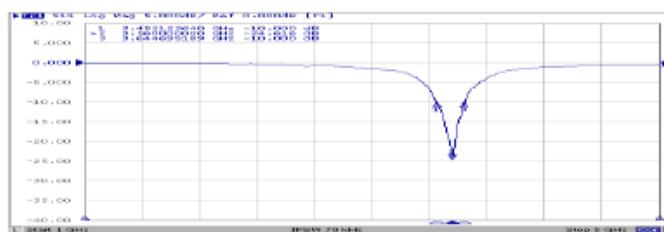
### 1. Dimensions (Unit: mm)



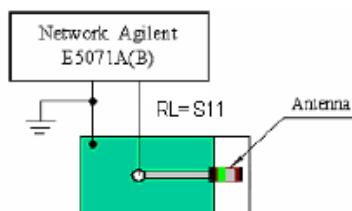
### 2. Electrical Characteristics

| No. | Item                            | Specifications           |
|-----|---------------------------------|--------------------------|
| 1   | Central Frequency (No matching) | 2450 MHz                 |
| 2   | Band Width (No matching)        | 100 MHz ( 2400~2500MHz ) |
| 3   | Gain                            | 0~2 dBi                  |
| 4   | V.S.W.R (in BW)                 | ≤2.0                     |
| 5   | Polarization                    | Linear                   |
| 6   | Azimuth Beam width              | Omni-directional         |
| 7   | Impedance                       | 50 Ω                     |

### 3. Characteristic curve



### 4. Test Circuit

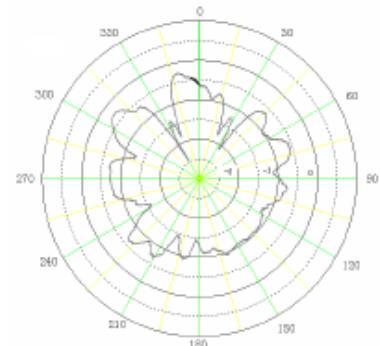
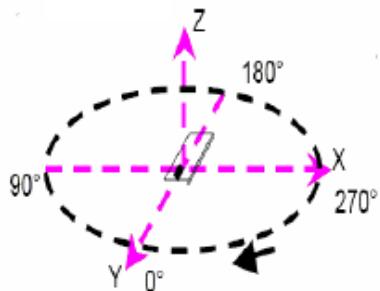


## Multilayer Chip Antenna

### 5. Radiation Tattern

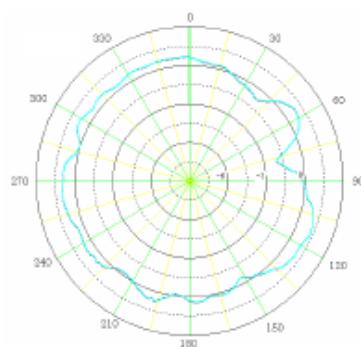
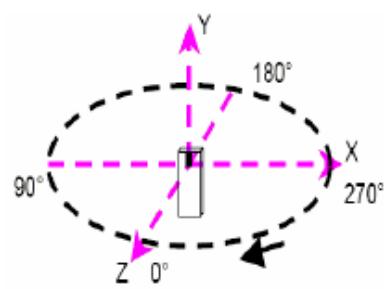
XY cut @2.45GHz  
— Vertical  
- - - Horizontal

XY-V/XY-H



XZ cut @2.45GHz  
— Vertical  
- - - Horizontal

YZ-V/YZ-H



XZ cut @2.45GHz  
— Vertical  
- - - Horizontal

YZ-V/YZ-H

