

# 2.4GHz Multilayer Monopole Antenna (for Bluetooth®, W-LAN)

## AH 212M245001



### Shapes

$L = 2.0 \pm 0.3 \text{ mm}$   
 $W = 1.25 \pm 0.2 \text{ mm}$   
 $T = 0.85 \pm 0.2 \text{ mm}$

### Feature

- \* Ultra Small
- \* Low Profile



### Actual data

**Efficiency : -1.8dB ( 66%)**  
**Peak Gain : 0.9dBi**  
**Average Gain : -0.9dBi (ZX plane-Vertical polarization)**  
**@2450MHz**



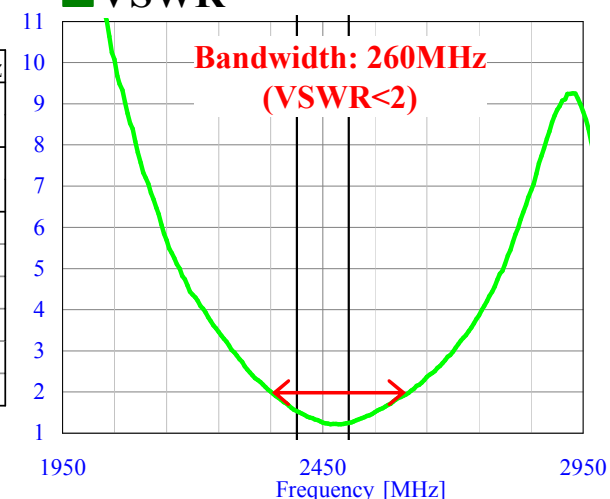
\*on Taiyo Yuden's Evaluation Board  
( 52 x 10 mm )

\*Element-GND Distance : 4.0 mm

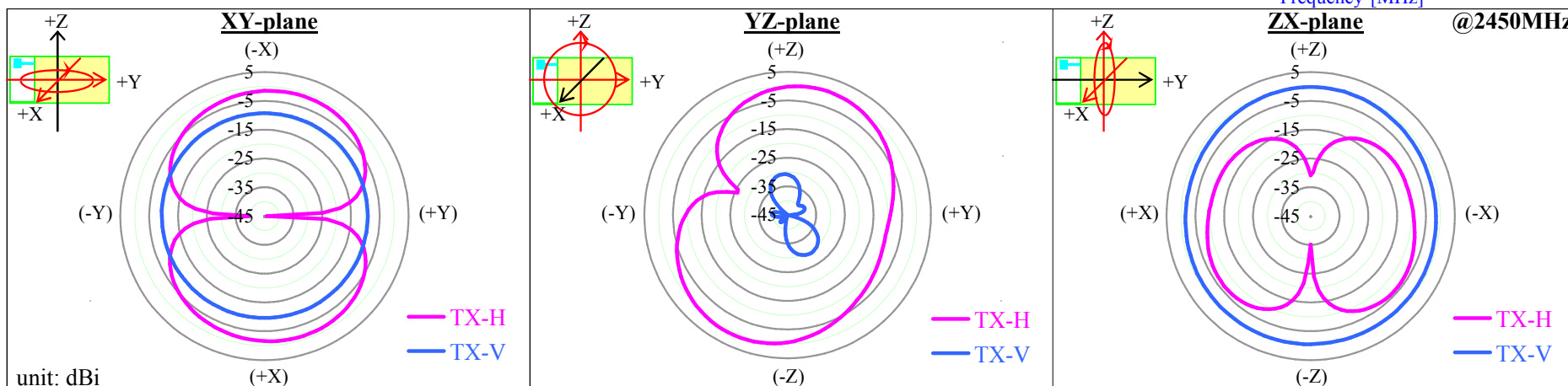
### Electrical Characteristics

|                    |          |      | 2400MHz        | 2450MHz        | 2500MHz        |
|--------------------|----------|------|----------------|----------------|----------------|
| Efficiency [dB]    |          |      | -1.9<br>( 64%) | -1.8<br>( 66%) | -1.7<br>( 68%) |
| Peak gain [dBi]    |          |      | 0.9            | 0.9            | 1.3            |
| Average gain [dBi] | XY-plane | TX-H | -4.1           | -4.0           | -3.9           |
|                    |          | TX-V | -9.8           | -9.4           | -8.7           |
|                    | YZ-plane | TX-H | -3.0           | -3.0           | -2.9           |
|                    |          | TX-V | -35.7          | -35.1          | -34.9          |
|                    | ZX-plane | TX-H | -10.1          | -9.8           | -9.3           |
|                    |          | TX-V | -1.0           | -0.9           | -0.9           |

### VSWR



### Radiation Pattern



**Confidential**

**TAIYO YUDEN**

Date: Feb/25/2010