

Technical Data Sheet of BT Antenna on Standard PWB

LDA21K Series P/N: LDA212G3110K-282

Note

Please confirm the latest specification for antenna shape and dimensions.

Capacitors and Inductors used in this report are as follows unless otherwise specified.

The values of each components are mentioned in the report.

In case using different series or manufactures' components, another value may be required to get the proper result.

Capacitors: GRM15 series (Murata)

Inductors: LQG15HS series (Murata)

Kanazawa Murata Mfg.Co.,Ltd
Antenna Products Department

1. Appearance **PWB**

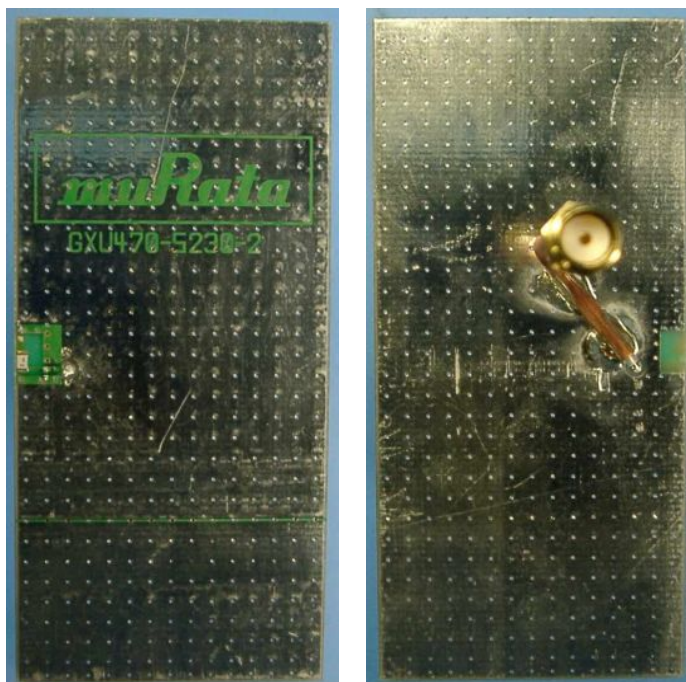


Fig. 1 Appearance of Measurement Board (37x80mm)

Antenna

LDA212G3110K-282 (2.0x1.25x0.95mm)

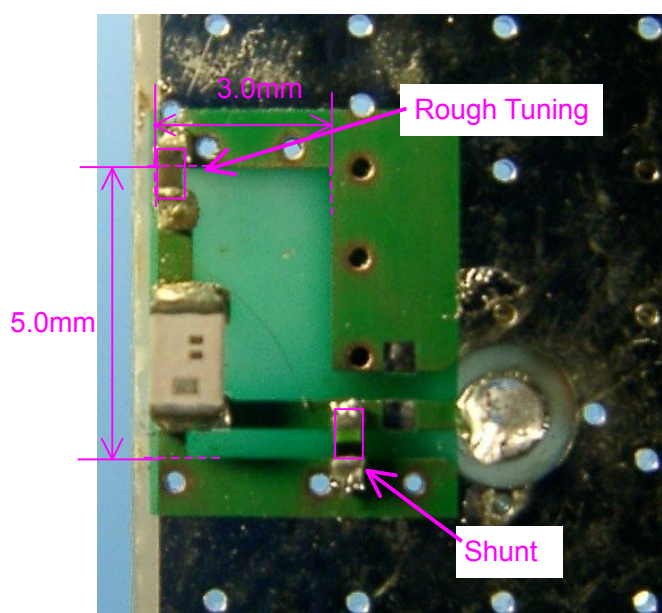


Fig. 2 Appearance of GND Clearance Area

2. Measurement Condition

Condition1: LDA212G3110K-282

Rough Tuning : 8.0pF, Shunt: 3.0nH

3. Measurement direction

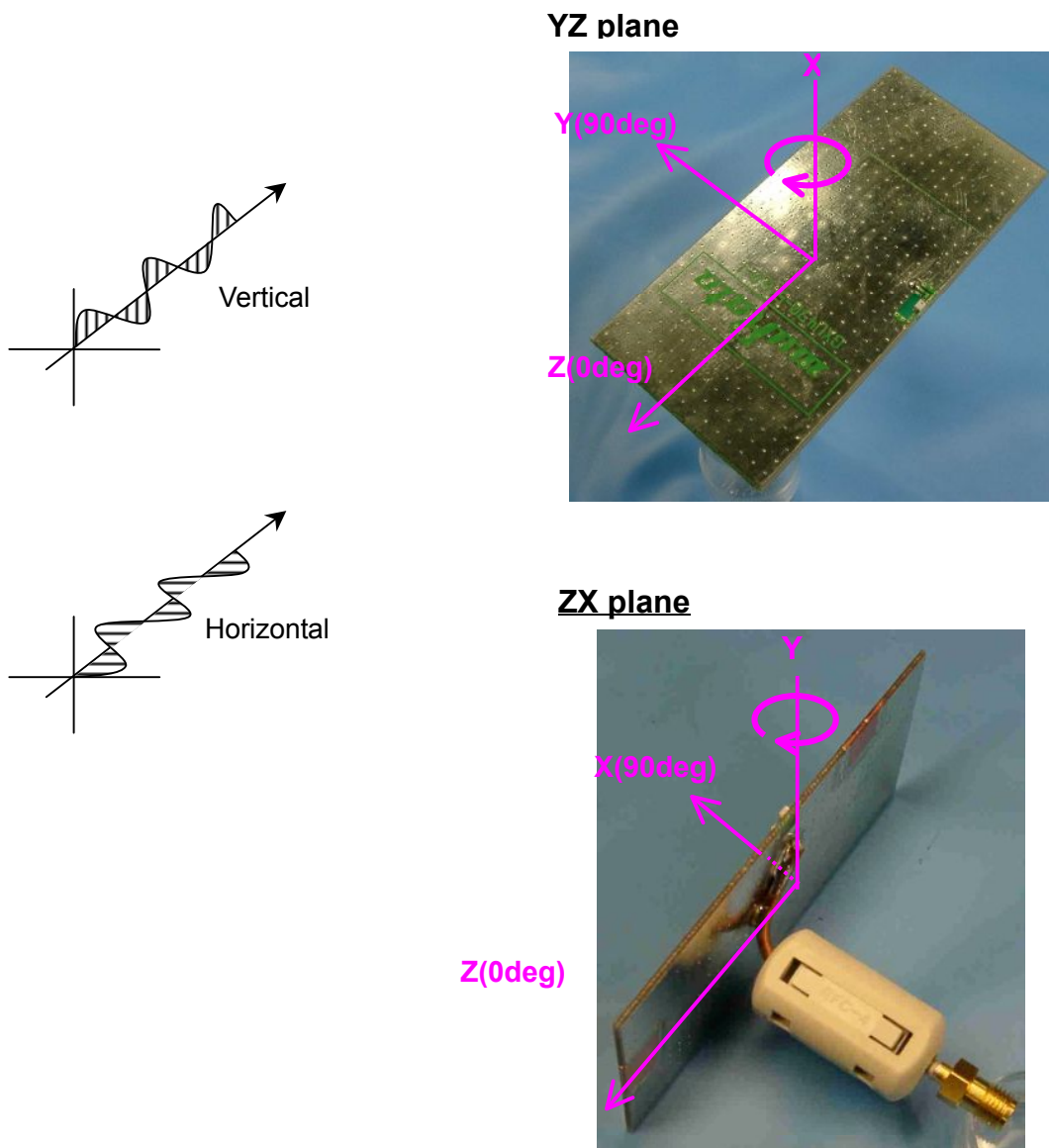


Fig. 3 Measurement direction in Free Space

4. Measurement result

4.1 Return loss

S11 logMAG 5dB/REF0dB

S11 1 UFS

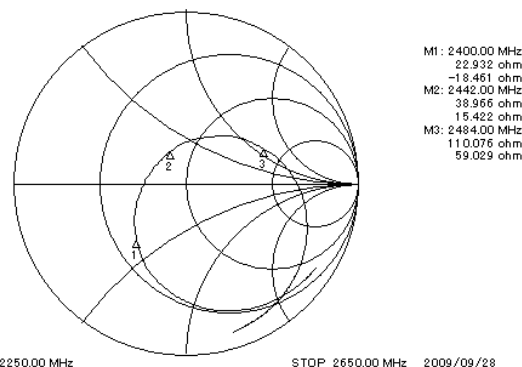
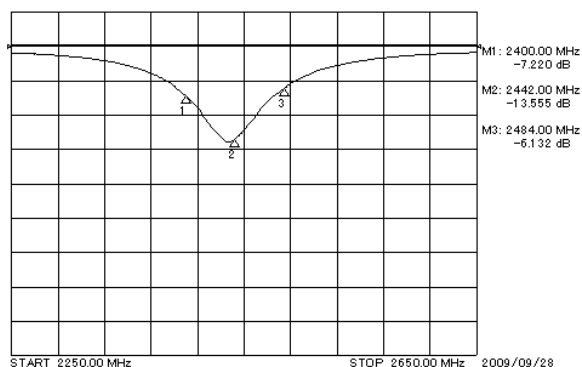


Fig. 4 Condition 1: LDA21K

4.2 Antenna gain(3D measurement)

Table. 1 Condition 1: LDA21K

| BT | | [dBi] | | | | [dB] |
|---------------------|-----|----------|-------|----------|------|------------------|
| LINEAR POLARIZATION | | YZ-plane | | ZX-plane | | Total Efficiency |
| | | hor. | ver. | hor. | ver. | |
| 2400 MHz | MAX | -0.2 | -14.8 | -1.4 | -3.3 | -3.1 |
| | AVE | -3.3 | -20.4 | -6.4 | -6.4 | |
| 2442 MHz | MAX | 0.9 | -12.5 | -0.6 | -2.1 | -2.2 |
| | AVE | -2.4 | -19.1 | -5.6 | -5.1 | |
| 2484 MHz | MAX | -0.4 | -13.2 | -1.9 | -3.1 | -3.2 |
| | AVE | -3.4 | -19.3 | -6.8 | -5.8 | |

4.3 Radiation Pattern(3D measurement)

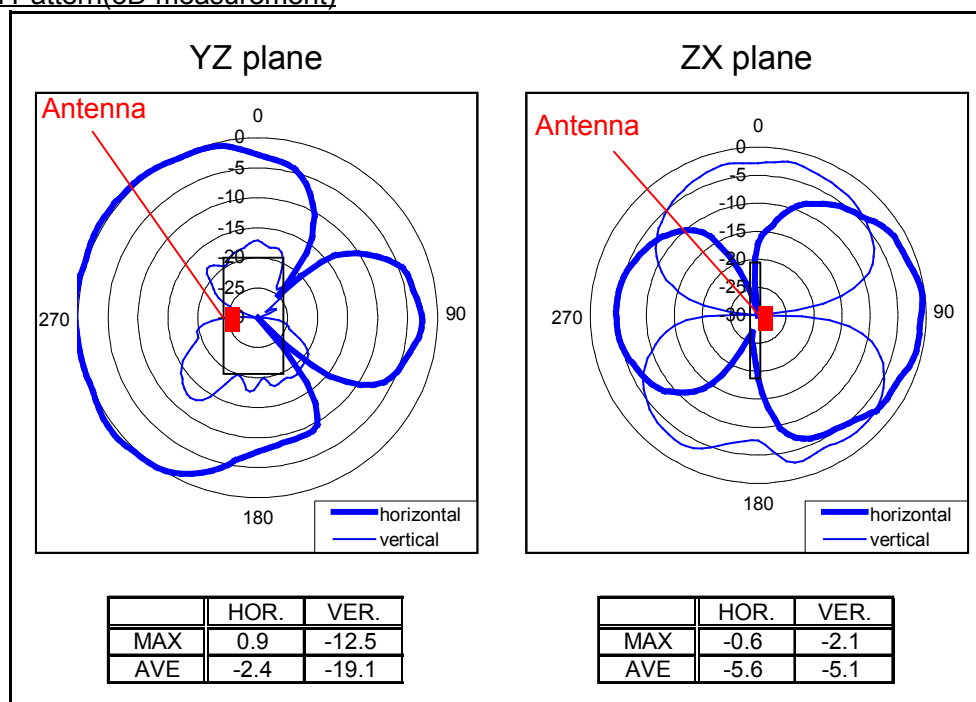


Fig. 5 Condition 1: LDA21K