



# GHT25-0351

# **Antenna Datasheet**

TITLE: AP02ML1630411C0 SERIES AP02ML1630411C0 シリーズ

- 1. 特徴 Features
  - LTE / 5G (Sub-6) 1.71-6 GHz
  - 小型 Compact size
  - 高効率 High efficiency
  - 細線同軸ケーブル付き FPC FPC with a microcoax cable
    - \* LTE (Long Term Evolution)
    - \*\* FPC (Flexible Printed Circuit Board)
- 2. 品名 Product name 単品 Single unit; AP02ML1630411C0
- 3. 形状、寸法と重量 Shape, dimensions and weight
- 3.1. 形状 Shape





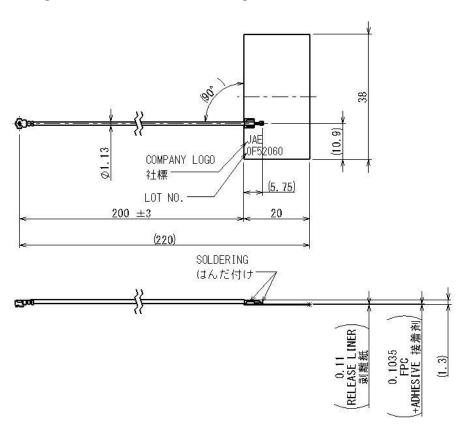


#### 3.2. 寸法 Dimensions

PCB 38 (width) × 20 (depth) × 0.12 (height) mm

# 接着剤の厚みを含み、剥離紙の厚みを除く

Including adhesive thickness and excluding release liner thickness



3.3. ケーブル Cable

 $\phi$ 1.13 mm

3.4. Length 200 mm コネクタ Connector

U.FL / MHF1 相当 U.FL / MHF1 Equivalent

3.5. 重量 Weight

0.9 g (typical)

200 mm ケーブルを含み剥離紙の重量を含まない、典型値

including 200 mm cable and excluding release liner weight, typical value

3.6. 方式 Type

スプリットリング Split ring

3.7. FPC 材料 Material

ポリイミド PI

3.8. 両面テープ Double-sided tape

3M 467MP

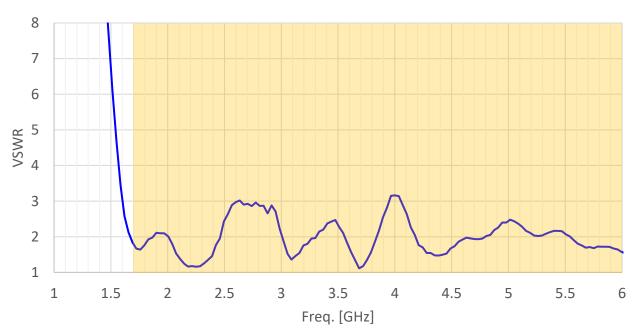




- 4. 高周波特性 RF characteristics
- 4.1. 周波数帯域 Frequency range 1.7-6 GHz
- 4.2. インピーダンス Impedance  $50\,\Omega$
- 4.3. Voltage standing wave ratio (VSWR)

2mm 厚の ABS 板貼り付け時の VSWR 特性例

VSWR characteristics of the antenna on a 2-mm thickness ABS board







# 4.4. 放射効率 Radiation efficiency

2mm 厚の ABS 板貼り付け時の放射効率特性例、ケーブル損を含む

Radiation efficiency of the antenna mounted on a 2-mm thickness ABS board (including cable loss)







# 4.5. 放射パターン Radiation pattern

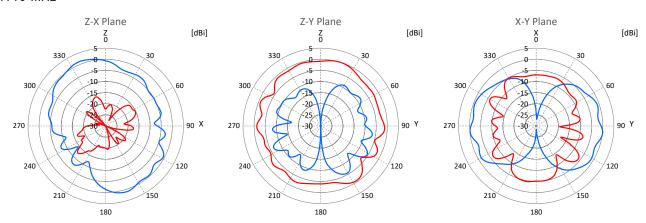
# 2mm 厚の ABS 板貼り付け時の放射パターン特性例

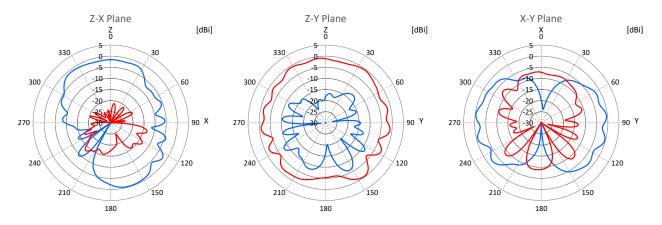
Radiation pattern of the antenna mounted on a 2-mm thickness ABS board



#### Radiation pattern

# 1710 MHz



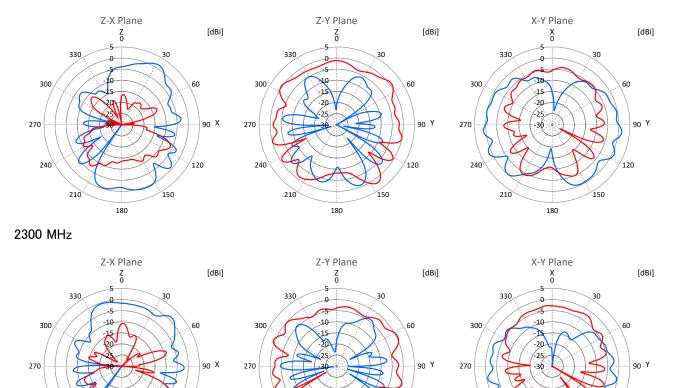






180

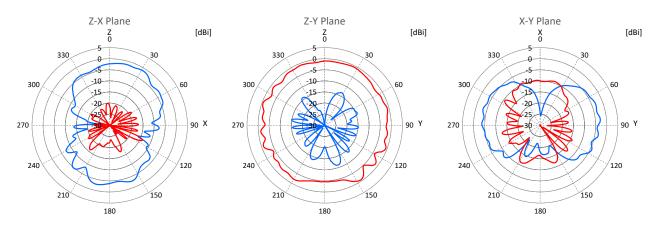
#### 2170 MHz



# 2690 MHz

180

240

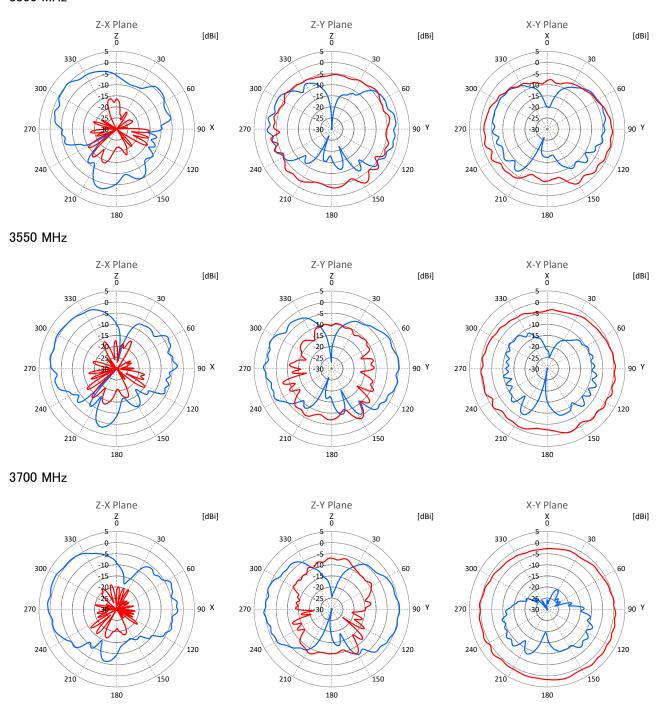


180

210

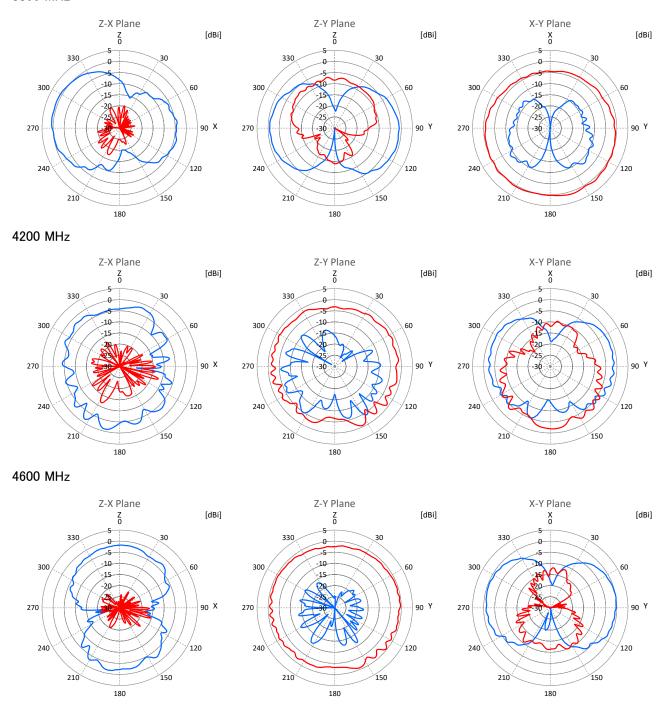






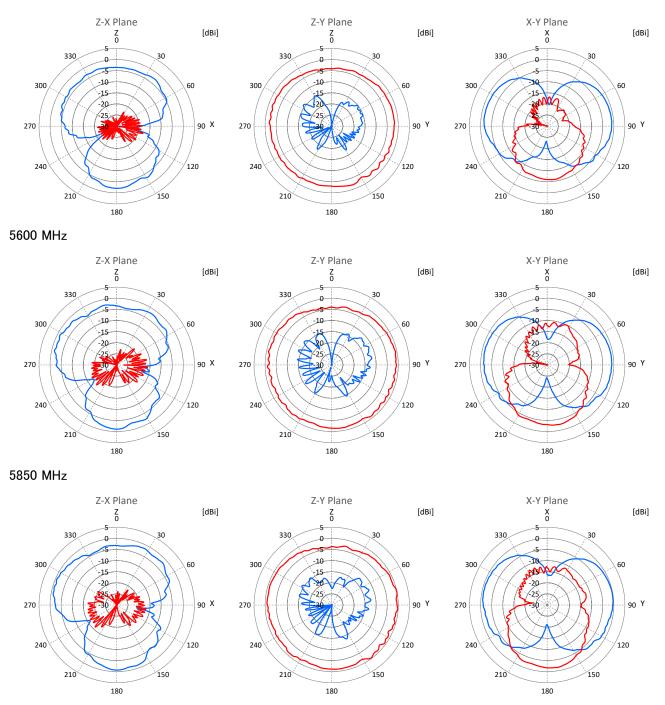






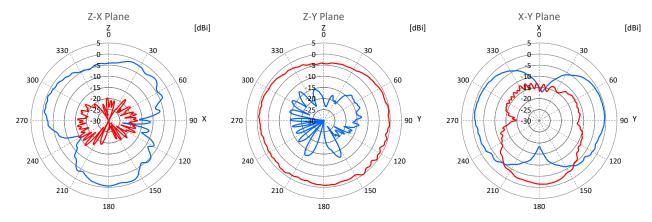




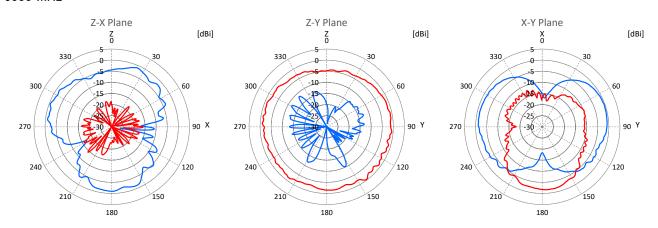








#### 6000 MHz



青線 Blue line: 水平偏波 Horizontal polarization

赤線 Red line: 垂直偏波 Vertical polarization





# Peak gain of the main polarization component in the ZX, ZY and XY planes

Frequency [MHz]	Peak gain [dBi]
1710	1.3
1900	-0.28
2170	1.99
2300	1.68
2690	-0.46
3300	0.15
3550	1.25
3700	2.24
3800	1.21
4200	-0.60
4600	-0.02
5150	-0.81
5600	-0.64
5850	-0.12
5925	0.07
6000	-0.25





- 5. 環境条件 Environmental conditions
- 5.1. 使用温度範囲 Operating temperature range -40 °C to +85 °C
- 5.2. 保存条件 Storage conditions

IEC 60721-3-1

保存温度 Stock temperature range

-5 °C to +45 °C

相対湿度 Relative humidity

5 % to 95 %





# 改版履歴 Revision history

文書番号 Document number	日付 Date	改版 Revision
GHT25-0351	07 Mar. 2025	初版 Initial version