

GHT21-0731 - *

Antenna Datasheet

TITLE : AN01DL25M00 SERIES
AN01DL25M00 シリーズ

1. 特徴 Features

- 無線 LAN 向け 2.4 – 2.5 GHz / 5.15 – 5.85 GHz アンテナ
 2.4 – 2.5 GHz / 5.15 – 5.85 GHz Antenna for WLAN
- 小型 Compact size
- 高効率 High efficiency
- 表面実装部品 Surface mount device
- エンボスリール梱包 Embossed reel package

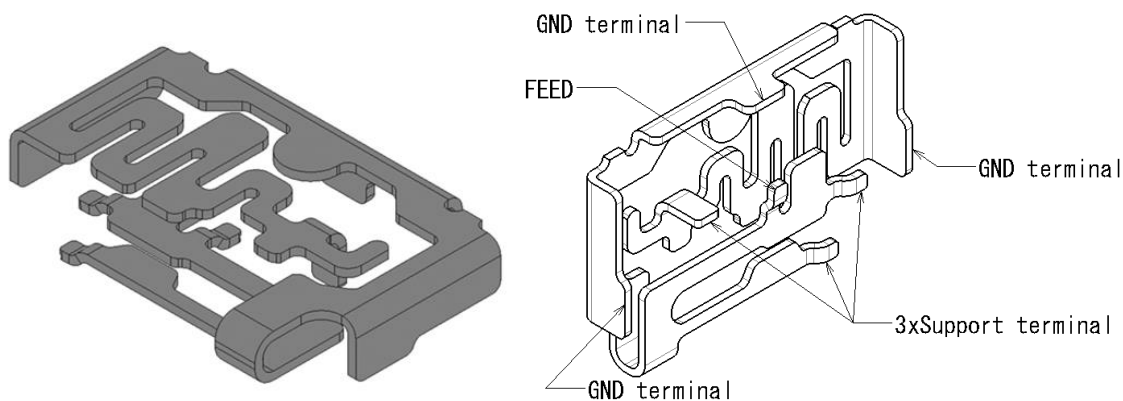
2. 品名 Product name

単品 Single unit: AN01DL25M00

3200 個パッケージ 3200-piece package: AN01DL25M00R3200

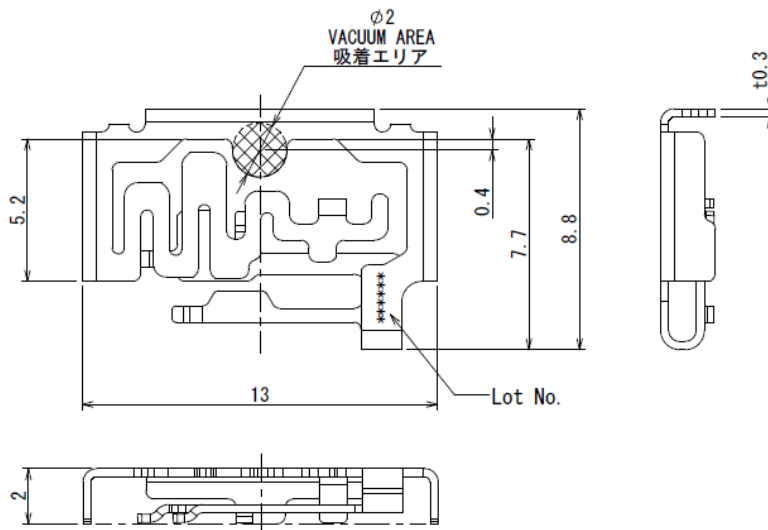
3. 形状、寸法と重量 Shape, dimensions and weight

3.1. 形状 Shape



3.2. 寸法 Dimensions

13 (width) × 8.8 (depth) × 2 (height) mm



3.3. 重量 Weight

0.26 g (typical)

3.4. めっき Plating

銀めっき Silver plating

3.5. 方式 Type

スプリットリング Split ring

3.6. 材料 Material

銅合金 Copper Alloy

4. 高周波特性 RF characteristics

4.1. 周波数帯域 Frequency range

2.4 – 2.5 GHz / 5.15 – 5.85 GHz

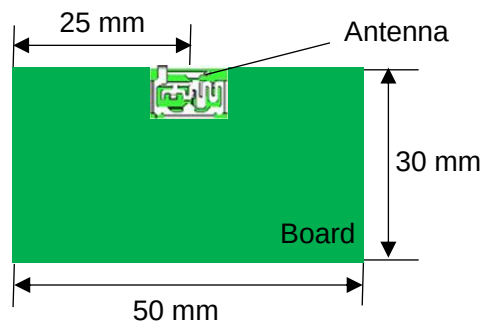
4.2. インピーダンス Impedance

50 Ω

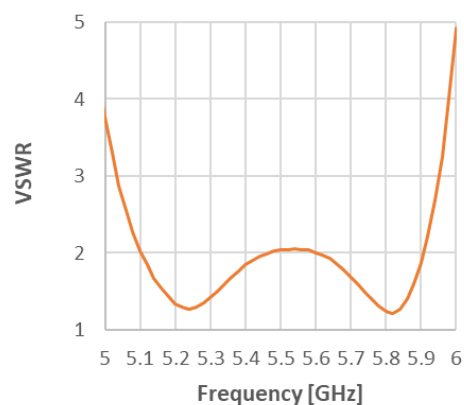
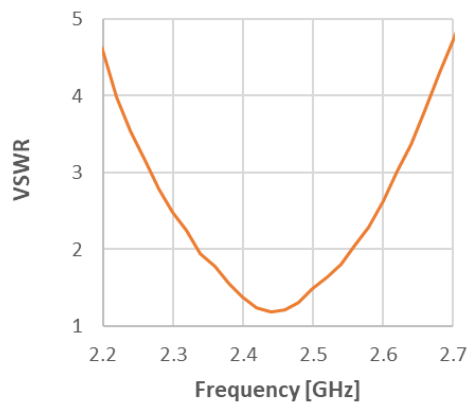
4.3. Voltage standing wave ratio (VSWR)

50 x 30 mm の標準基板実装時の VSWR 特性例

VSWR characteristics of the antenna on a 50 x 30-mm reference board



VSWR < 2.0 (Frequency range: 2.4 –2.5 GHz)、 < 2.5 (Frequency range: 5.15 – 5.85 GHz)

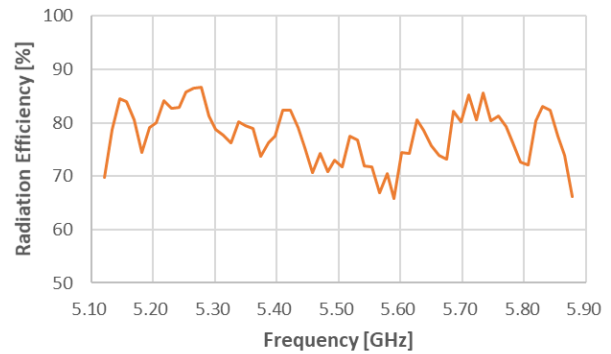
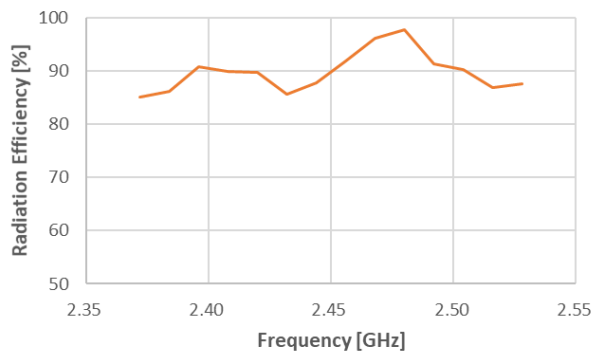


4.4 放射効率 Radiation efficiency):

50 x 30 mmの標準基板実装時の放射効率特性例、ケーブル・配線損を除く

Radiation efficiency of the antenna mounted on a 50 x 30-mm reference board (excluding cable and feeder-line loss)

Radiation efficiency > 85 % (Frequency range: 2.4 – 2.5 GHz), > 65 % (Frequency range: 5.15 – 5.85 GHz)



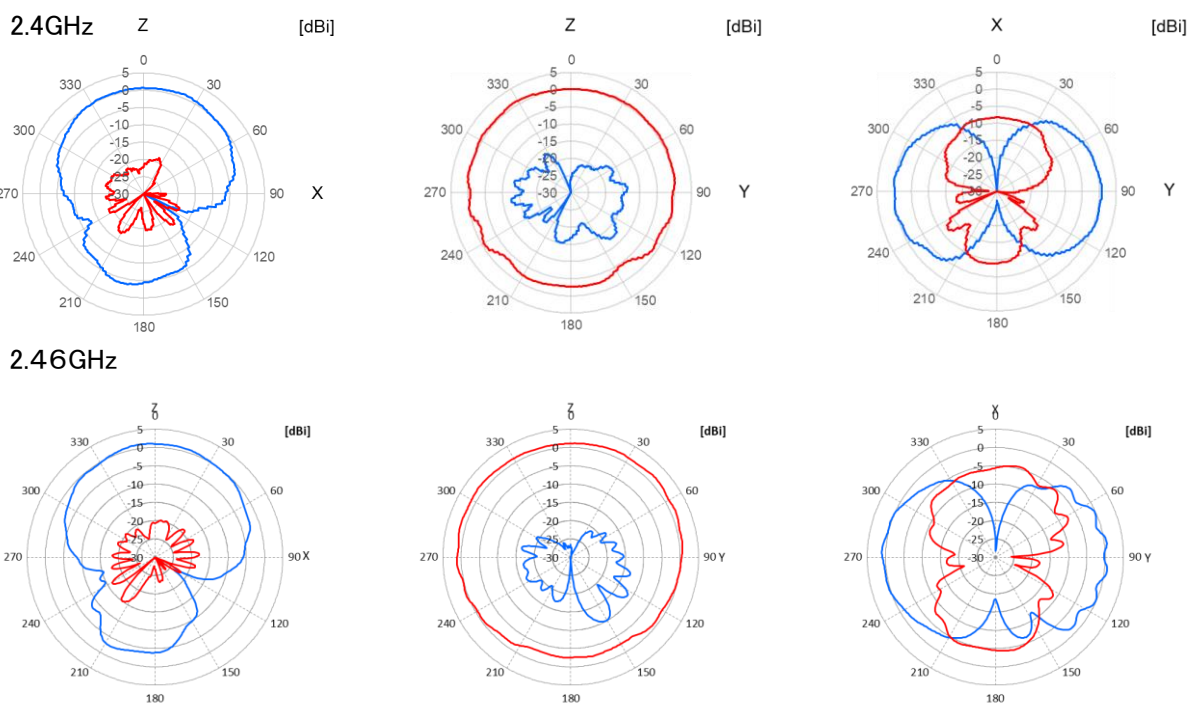
4.5 放射パターン Radiation pattern

50 x 30 mm の標準基板実装時の放射パターン特性例

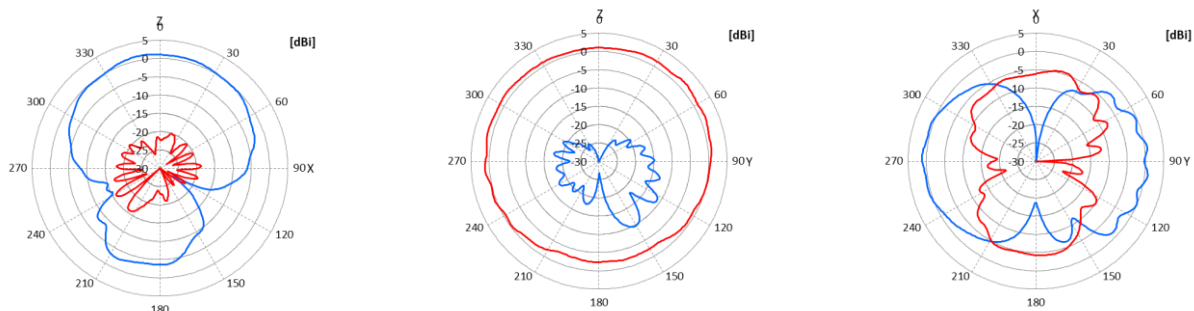
Radiation pattern of the antenna mounted on a 50 x 30-mm reference board



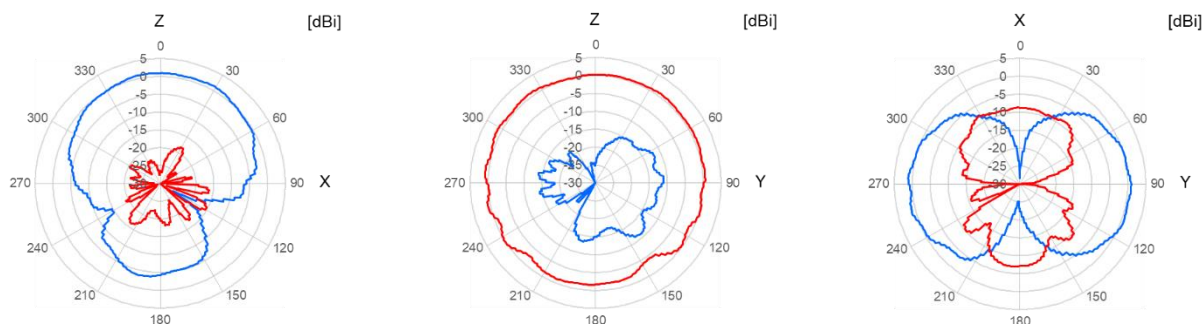
Radiation Pattern



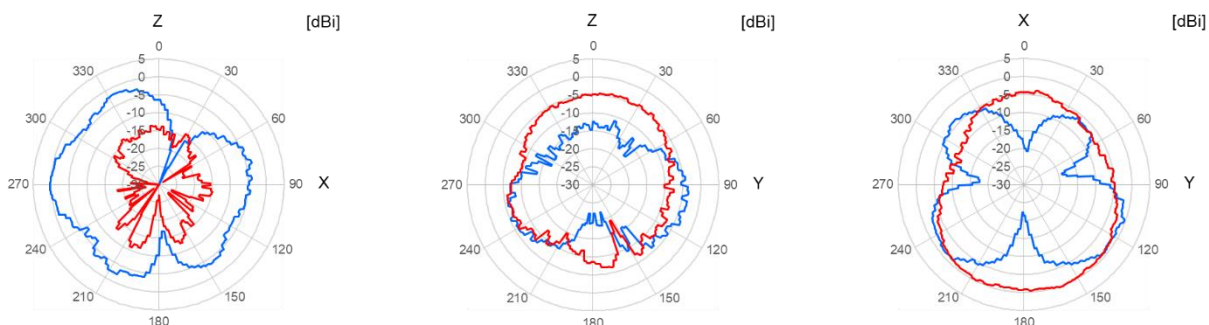
2.48GHz



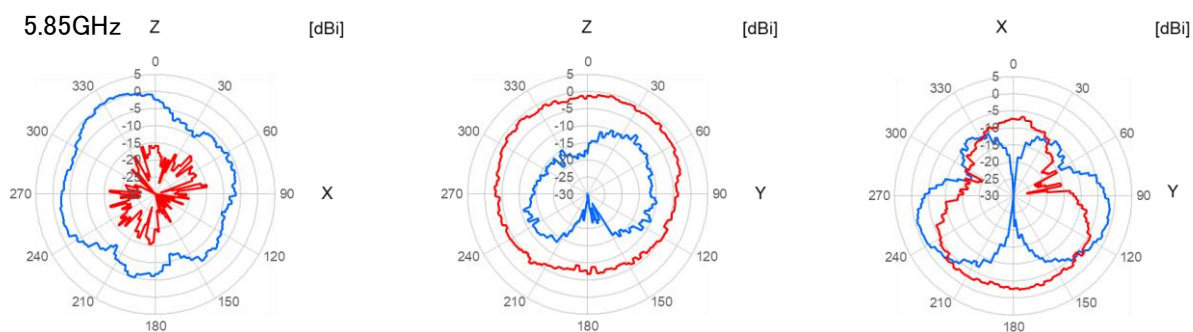
2.5GHz



5.15GHz



5.85GHz



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 [GHz]	Peak Gain [dBi]
2.4	1.10
2.46	1.78
2.48	1.83
2.5	1.21
5.15	0.30
5.85	0.99

5. 環境条件・信頼性 Environmental conditions and reliability

5.1. 使用温度範囲 Operating temperature range

-40 °C to +125 °C

5.2. 保存条件 Storage conditions

IEC 61760-2

保存温度 Stock temperature range

+5 °C to +40 °C

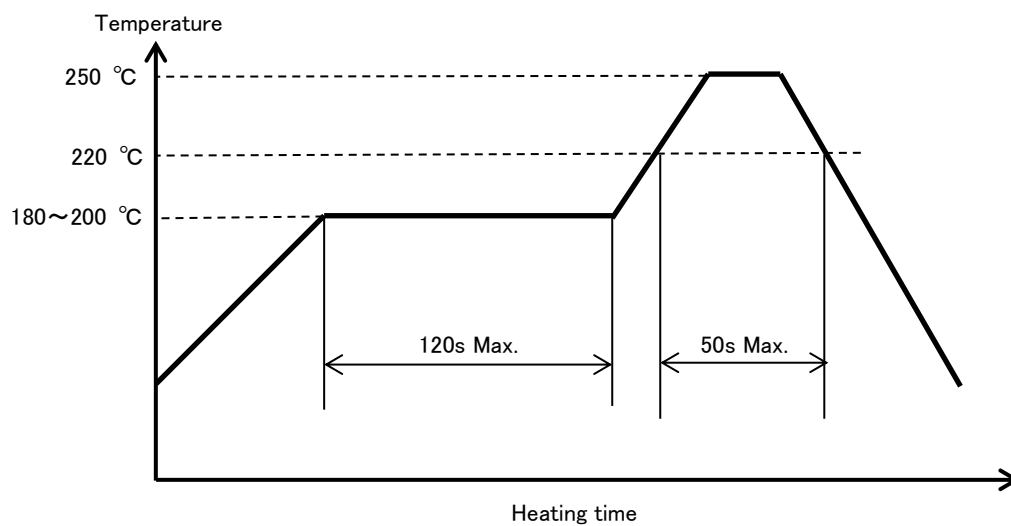
相对湿度 Relative humidity

10 % to 75 %

Reference board pattern (board thickness: 1.6 mm)

7. 推奨リフロー温度プロファイル Recommended reflow temperature profile

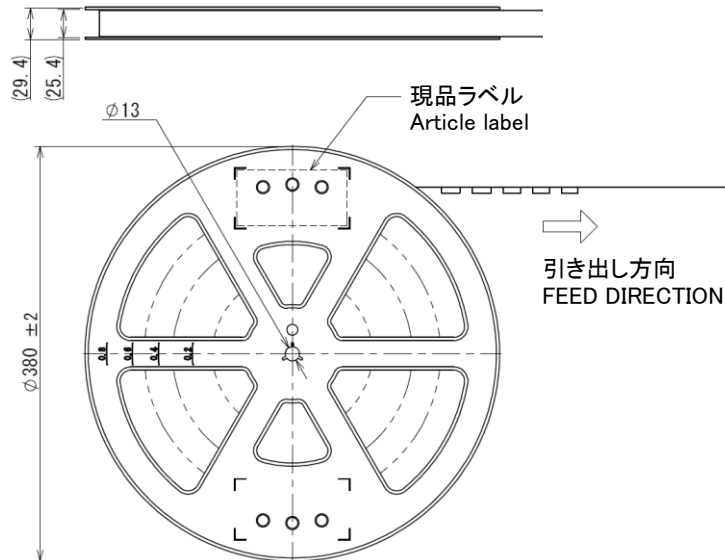
	温度 Temperature	加熱時間 Heating time
予備加熱 Preheating temperature	180 to 200 °C	120s (max.)
本加熱 Main heating temperature	Above 220 °C	50s (max.)
ピーク温度 Peak temperature	250 °C (max.)	–



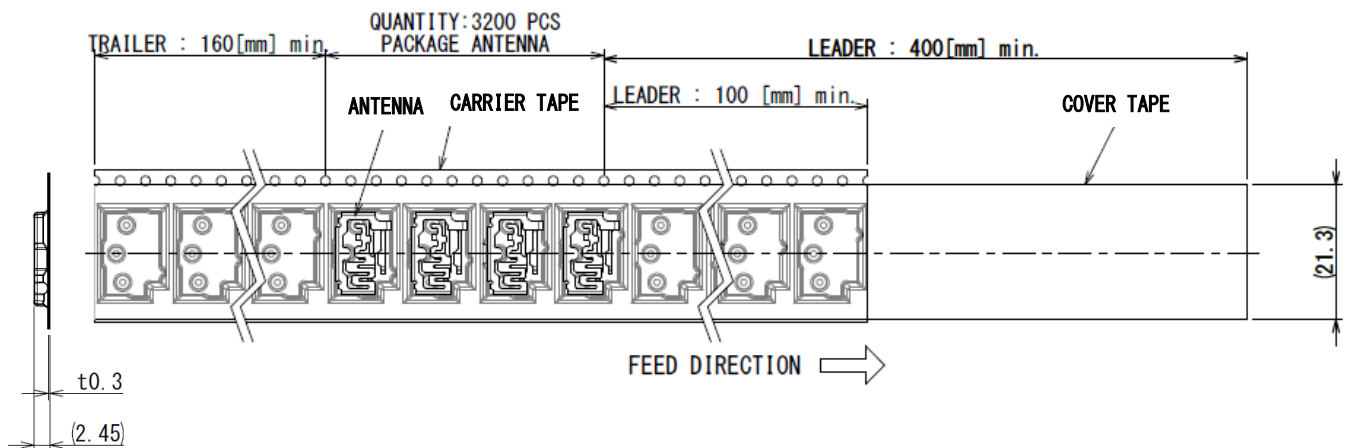
8. 梱包 Packaging

8.1. 梱包数量 Package quantity: 3,200 (pieces / reel)

8.2. エンボスリール寸法 Embossed reel dimensions



8.3. テープ寸法 Tape dimensions



9. 生産場所 Place of production

山形航空電子株式会社

JAE Yamagata, Ltd.

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4102-6 Aza Takadai-Shinden, Oaza Izumida, Shinjo City, Yamagata Prefecture

改版履歴 Revision history

文書番号 Document number	日付 Date	改版 Revision
GHT20-1213	01 Oct. 2020	初版 Initial version
GHT20-1592	03 Dec. 2020	2 版 Revision 2
GHT21-0731	04 Jun. 2021	3 版 Revision 3 - Sec. 3.6 材料を追加 Sec. 3.6: Added Material - Sec. 4.5 ピークゲインの値を追加 Sec. 4.5: Added value of peak gain - 表記の修正 Editorial changes
GHT21-0731-1	16 Jul. 2021	4 版 Revision 4 表記の修正 Editorial changes
GHT21-0731-2	08 Oct. 2021	5 版 Revision 5 表記の修正 Editorial changes
GHT21-0731-3	2 Aug. 2024	6 版 Revision 6 Sec. 9 生産場所を追加
GHT21-0731-4	11Nov 2024	7 版 Revision 7 Sec.4.5 ピークゲインの値を追加 Sec. 4.5: Added value of peak gain