WaveConnect™

JAE

GHT21-0733-2

Antenna Datasheet

TITLE : AN012400M00 SERIES
AN012400M00 シリーズ

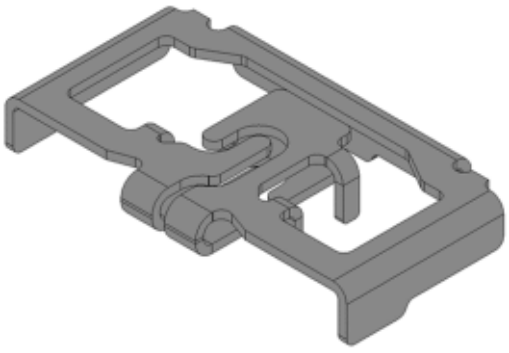
1. 特徴 Features

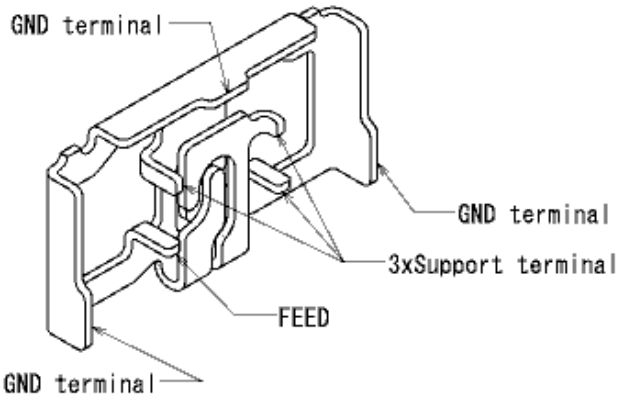
- 無線 LAN、Bluetooth 等向け 2.4 – 2.5 GHz アンテナ
  2.4 – 2.5-GHz antenna for WLAN, Bluetooth, etc.
- 小型 Compact size
- 高効率 High efficiency
- 表面実装部品 Surface mount device
- エンボスリール梱包 Embossed reel package

2. 品名 Product name
   単品 Single unit: AN012400M00
   3200 個パッケージ 3200-piece package: AN012400M00R3200

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

3.1. 形状 Shape



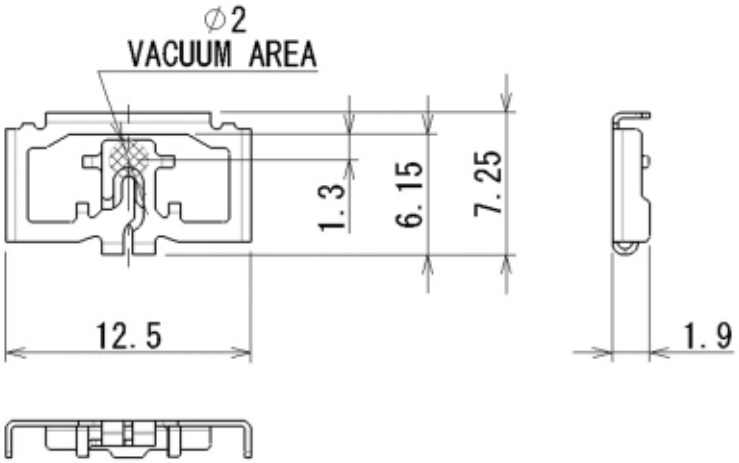


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3.2. 寸法 Dimensions

12.5 (width) × 7.25 (depth) × 1.9 (height) mm



3.3. 重量 Weight

0.22 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

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4. 高周波特性 RF characteristics

4.1. 周波数帯域 Frequency range

2.4 – 2.5 GHz

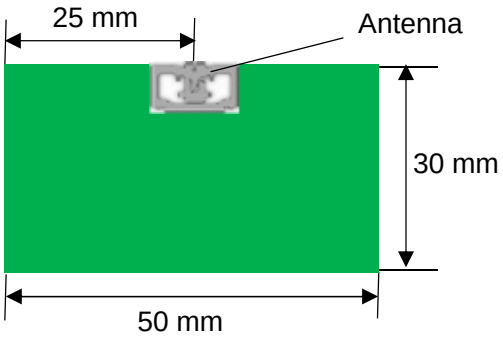
4.2. インピーダンス Impedance

50 Ω

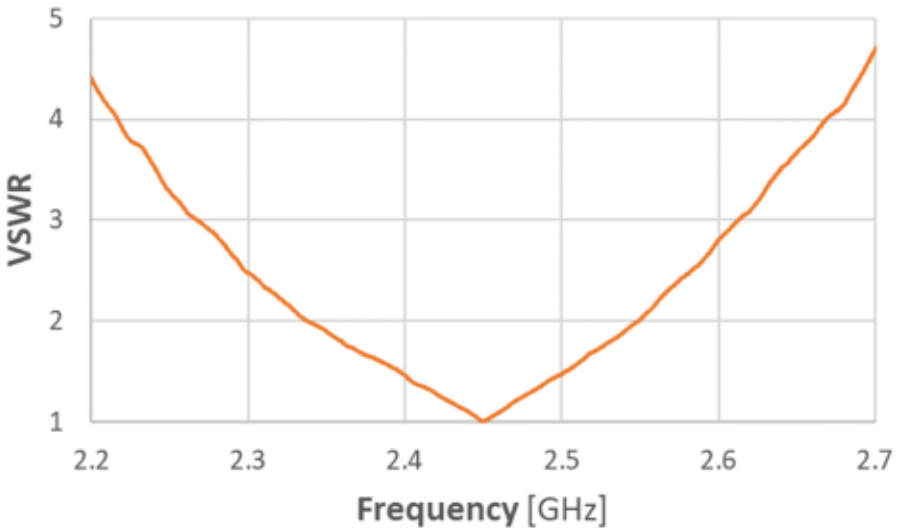
4.3. Voltage standing wave ratio (VSWR)

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 × 30–mm reference board



VSWR < 2.0 (frequency range: 2.4 – 2.5 GHz)



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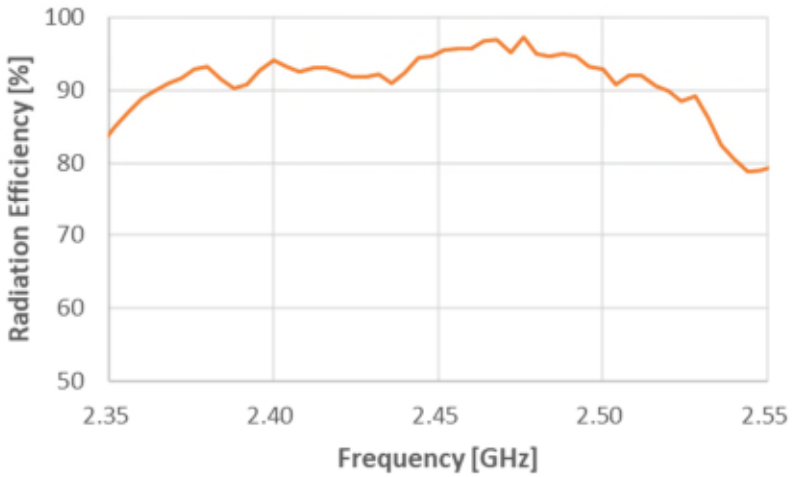
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4.4 放射効率 Radiation efficiency

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 × 30-mm reference board (excluding cable and feeder-line losses)

Radiation efficiency > 85 % (frequency range: 2.4 – 2.5 GHz)



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4.5. 放射パターン Radiation pattern:

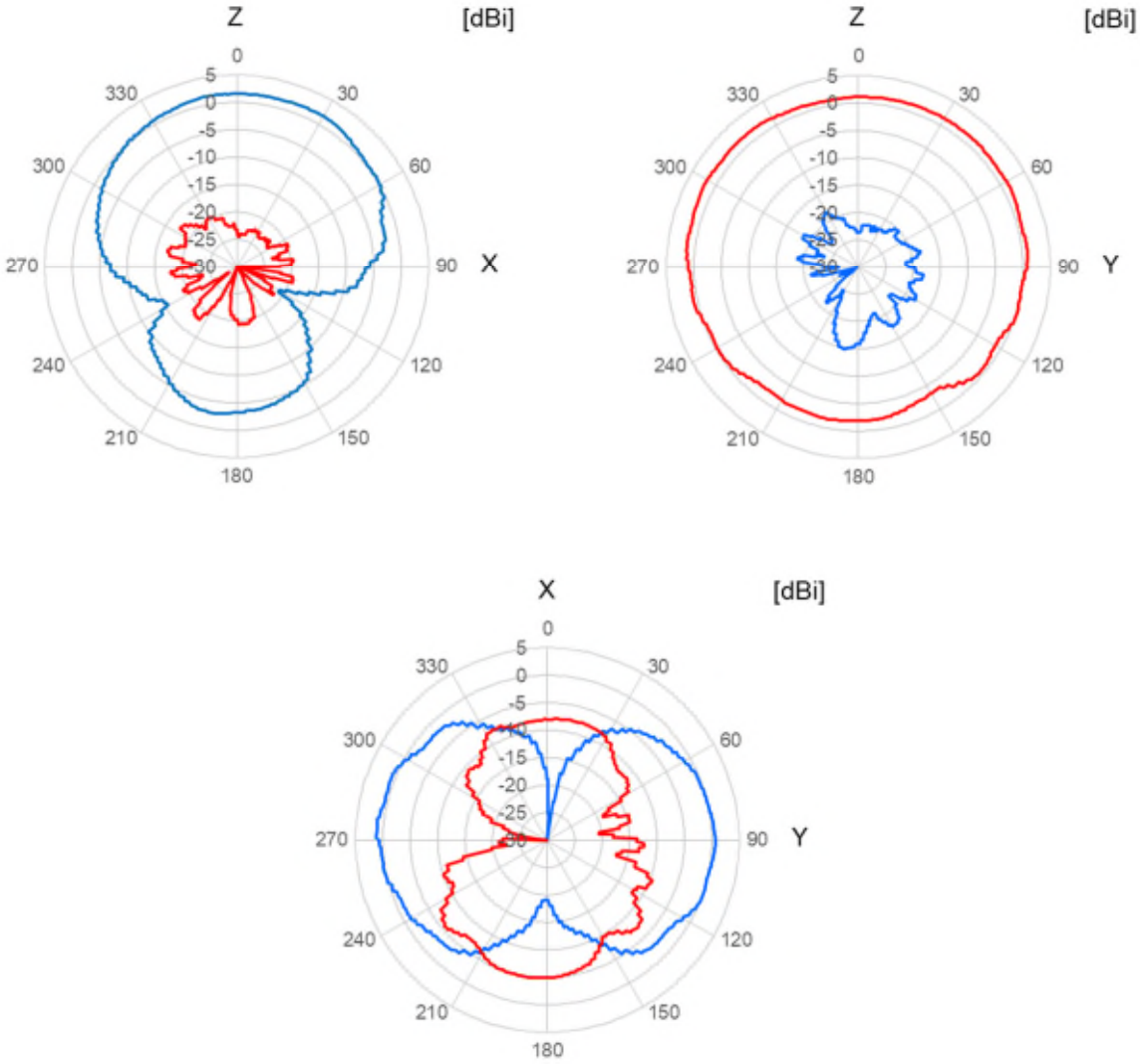
50 x 30 mm の標準基板実装時の放射パターン特性例

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



Radiation pattern

2.45 GHz



青線 Blue line: 水平偏波 Horizontal polarization

赤線 Red line: 垂直偏波 Vertical polarization

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

Frequency [GHz]	Peak gain [dBi]
2.45	1.91

5. 環境条件 Environmental conditions

5.1. 使用温度範囲 Operating temperature range

−40 ℃ to +125 ℃

5.2. 保存条件 Storage conditions

IEC 61760-2

保存温度 Stock temperature range

+5 ℃ to +40 ℃

相対湿度 Relative humidity

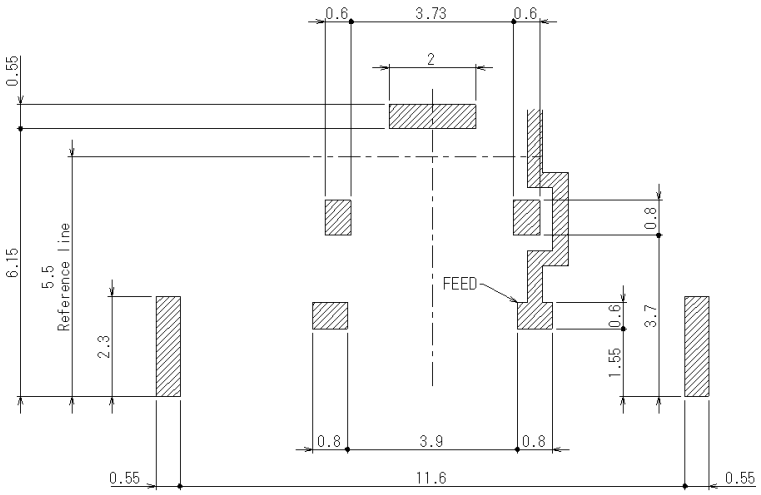
10 % to 75 %

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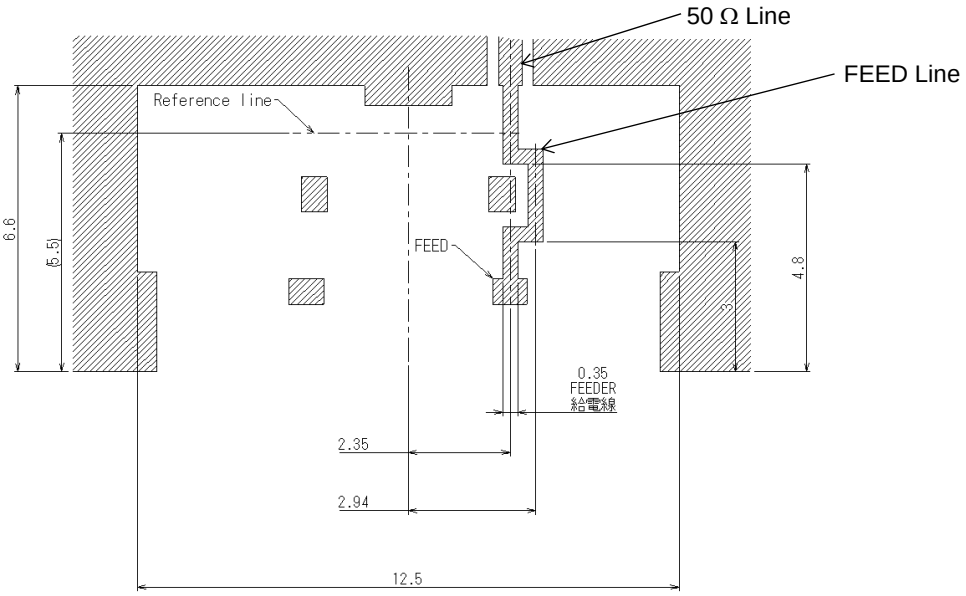
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6. 推奨ランドパターンおよび推奨基板 Recommended land pattern and reference board



Recommended land pattern



Reference board pattern (board thickness: 1.6 mm)

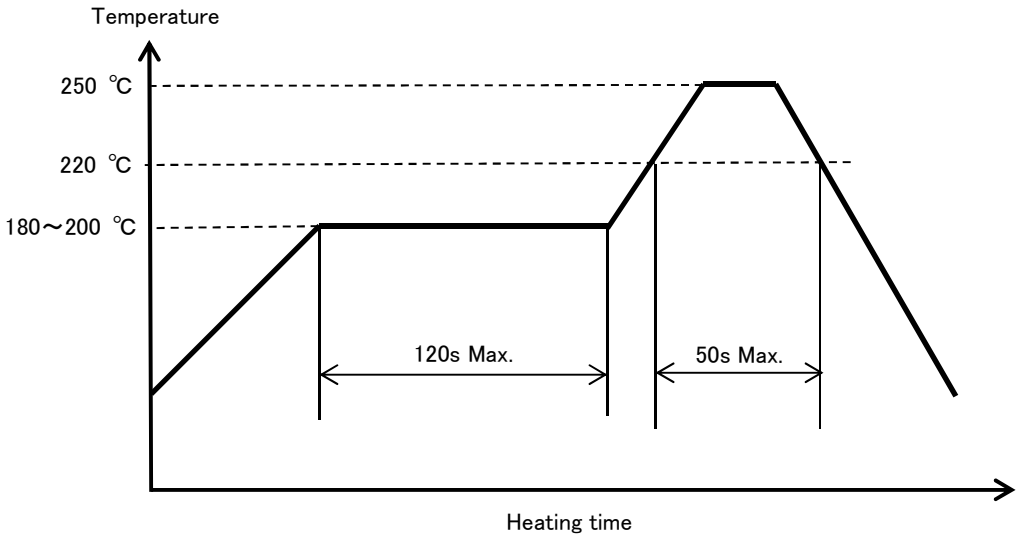
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7. 推奨リフロー温度プロファイル Recommended reflow temperature profile

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



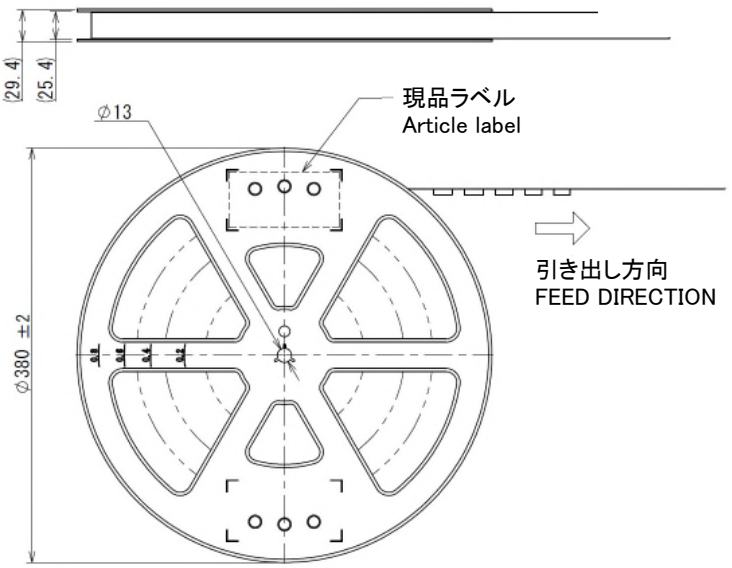
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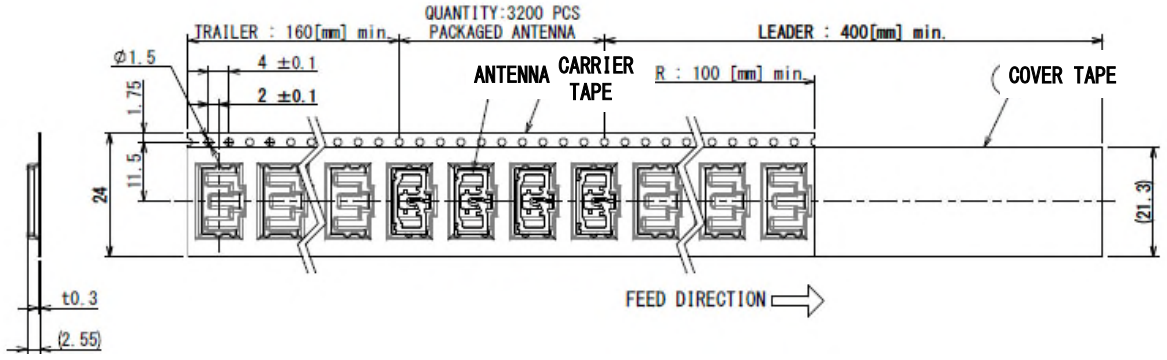
8. 梱包 Packaging

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



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改版履歴 Revision history

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GHT20-1211	01 Oct. 2020	初版 Initial version
GHT20-1590	03 Dec. 2020	2 版 Revision 2
GHT21-0733	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
GHT21-0733-1	07 Jul. 2021	4 版 Revision 4 - 表記の修正 Editorial changes
GHT21-0733-2	08 Oct. 2021	5 版 Revision 5 - 表記の修正 Editorial changes

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