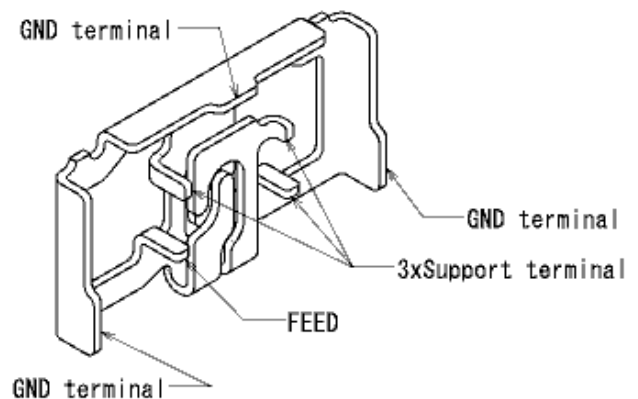
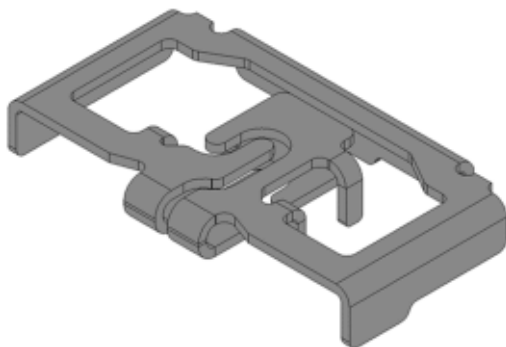


## Antenna Datasheet

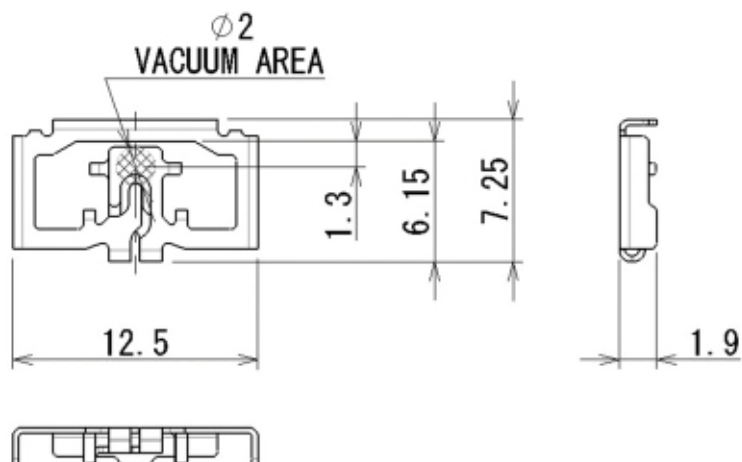
TITLE : AN012400M00 SERIES  
AN012400M00 シリーズ

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



### 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

#### 4. 高周波特性 RF characteristics

##### 4.1. 周波数帯域 Frequency range

2.4 – 2.5 GHz

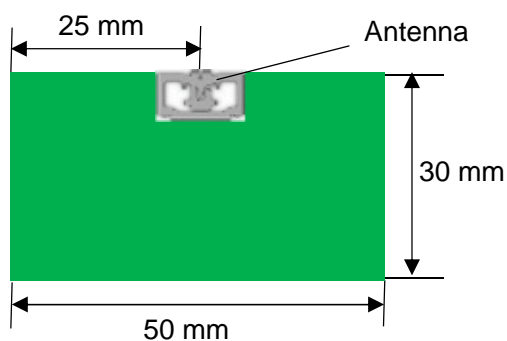
##### 4.2. インピーダンス Impedance

50 Ω

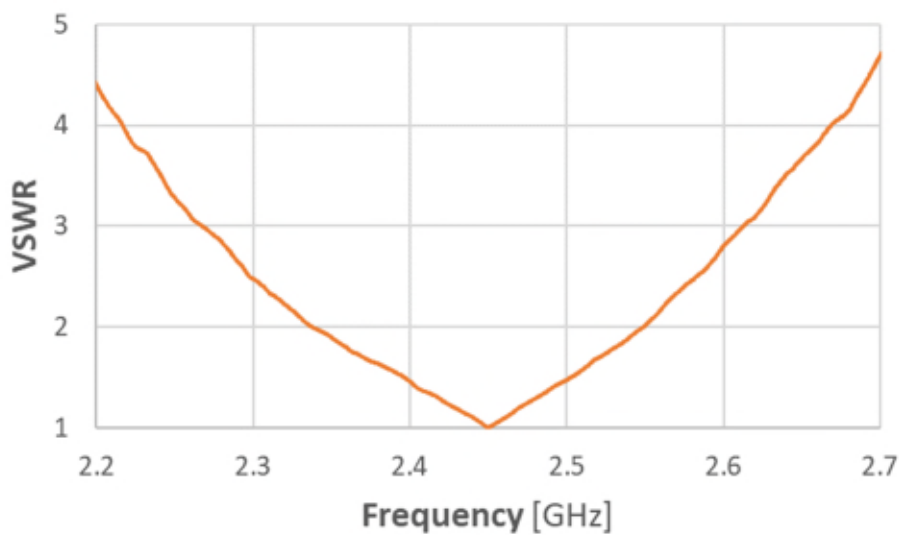
##### 4.3. Voltage standing wave ratio (VSWR)

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)

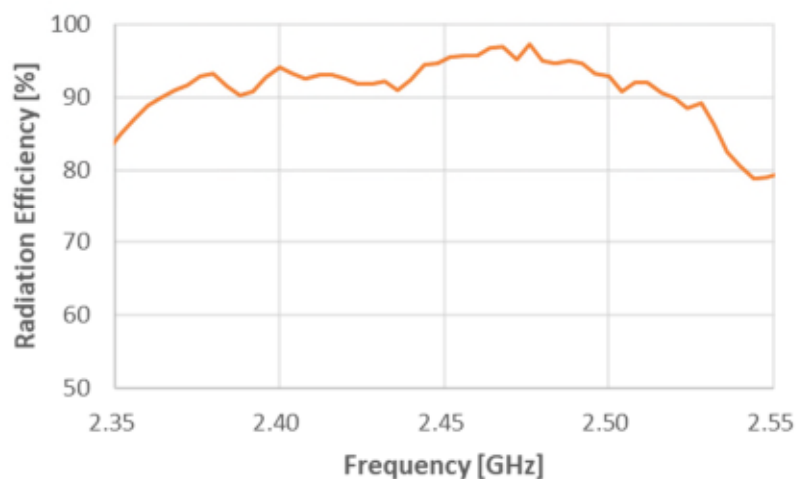


#### 4.4 放射効率 Radiation efficiency

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)



#### 4.5. 放射パターン Radiation pattern:

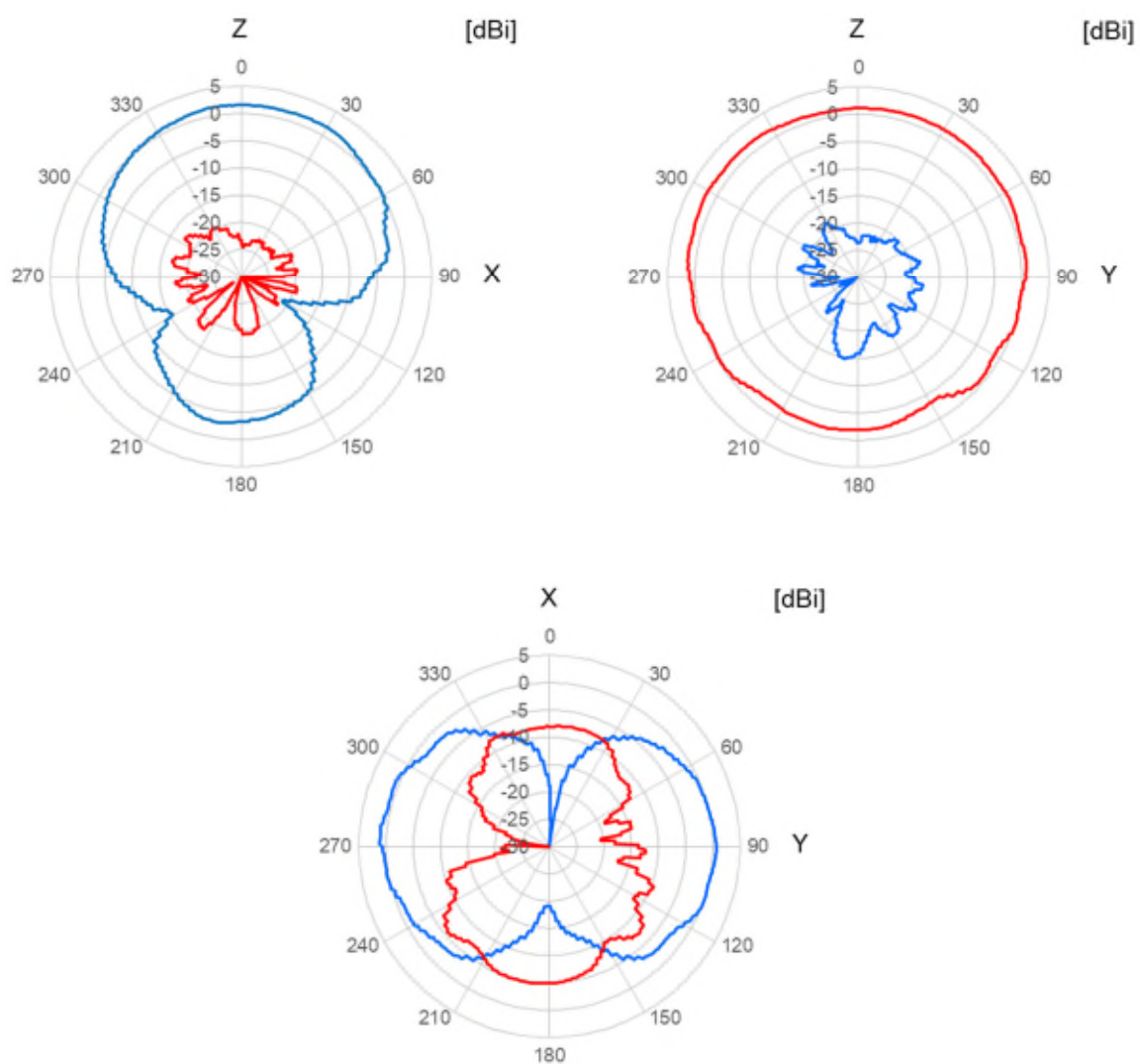
50 x 30 mm の標準基板実装時の放射パターン特性例

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



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 °C to +125 °C

5.2. 保存条件 Storage conditions

IEC 61760-2

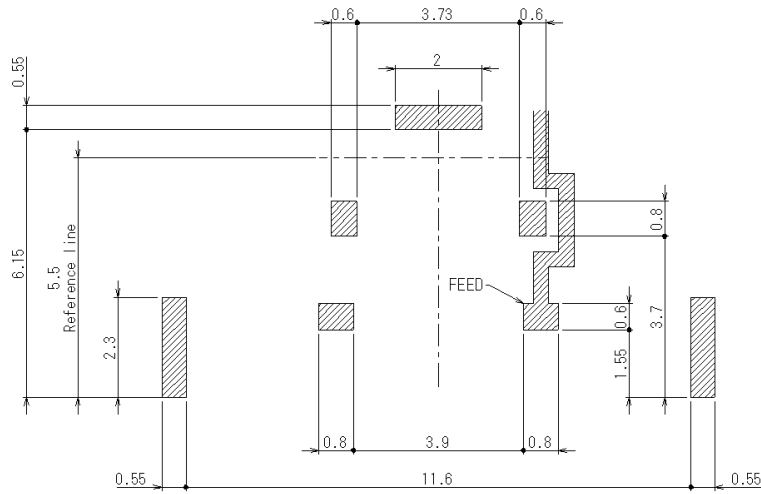
保存温度 Stock temperature range

+5 °C to +40 °C

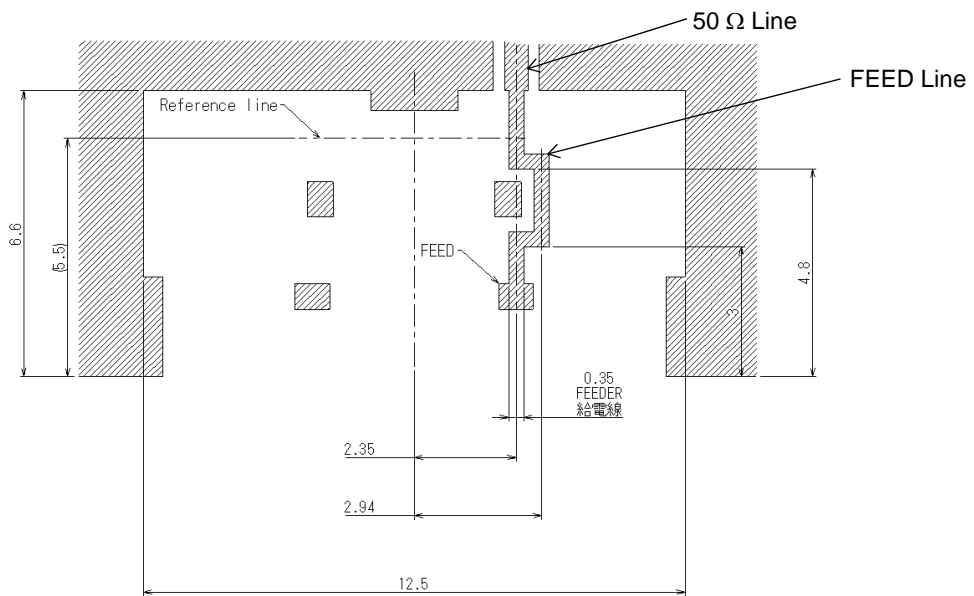
相对湿度 Relative humidity

10 % to 75 %

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



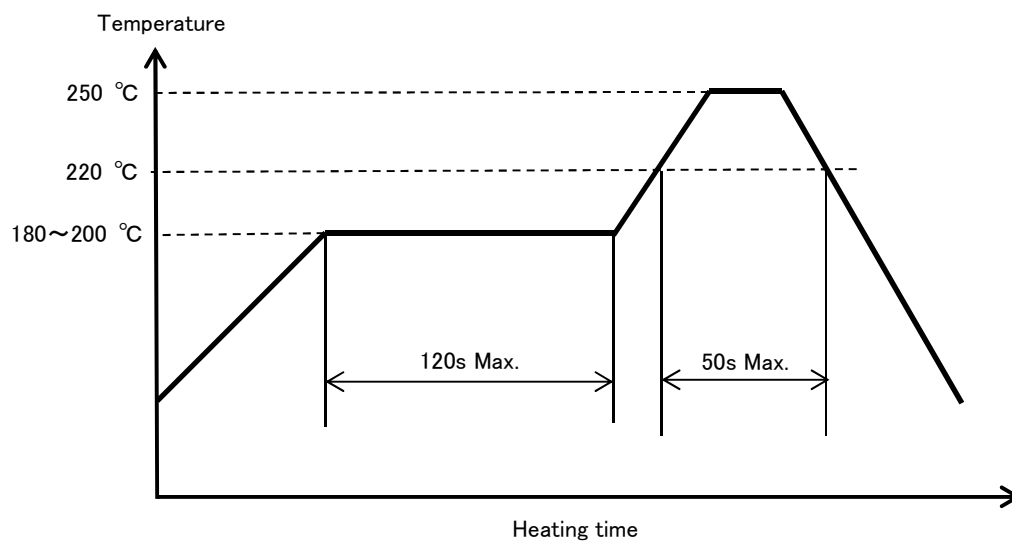
Recommended land pattern



Reference board pattern (board thickness: 1.6 mm)

## 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.)	-

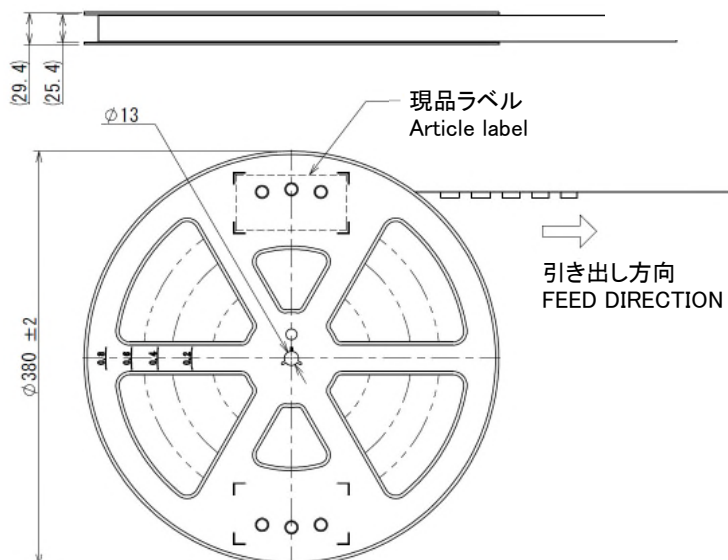




## 8. 梱包 Packaging

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

