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GHT21-1271-3

Antenna Datasheet

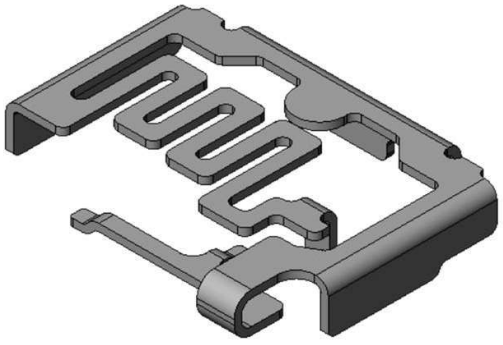
TITLE : AN01ML27C00 SERIES
AN01ML27C00 シリーズ

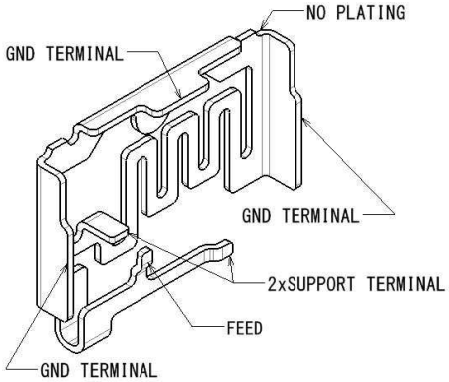
1. 特徴 Features
   - 無線 LAN 向け 2.4 – 2.5 GHz / 5.15 – 5.85 GHz / 5.925 – 7.125 GHz アンテナ
     2.4 – 2.5 GHz / 5.15 – 5.85 GHz / 5.925 – 7.125 GHz Antenna for WLAN
   - 小型 Compact size
   - 高効率 High efficiency
   - 表面実装部品 Surface mount device
   - エンボスリール梱包 Embossed reel package

2. 品名 Product name
   単品 Single unit: AN01ML27C00
   2400 個パッケージ 2400–piece package: AN01ML27C00R2400

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

3.1. 形状 Shape



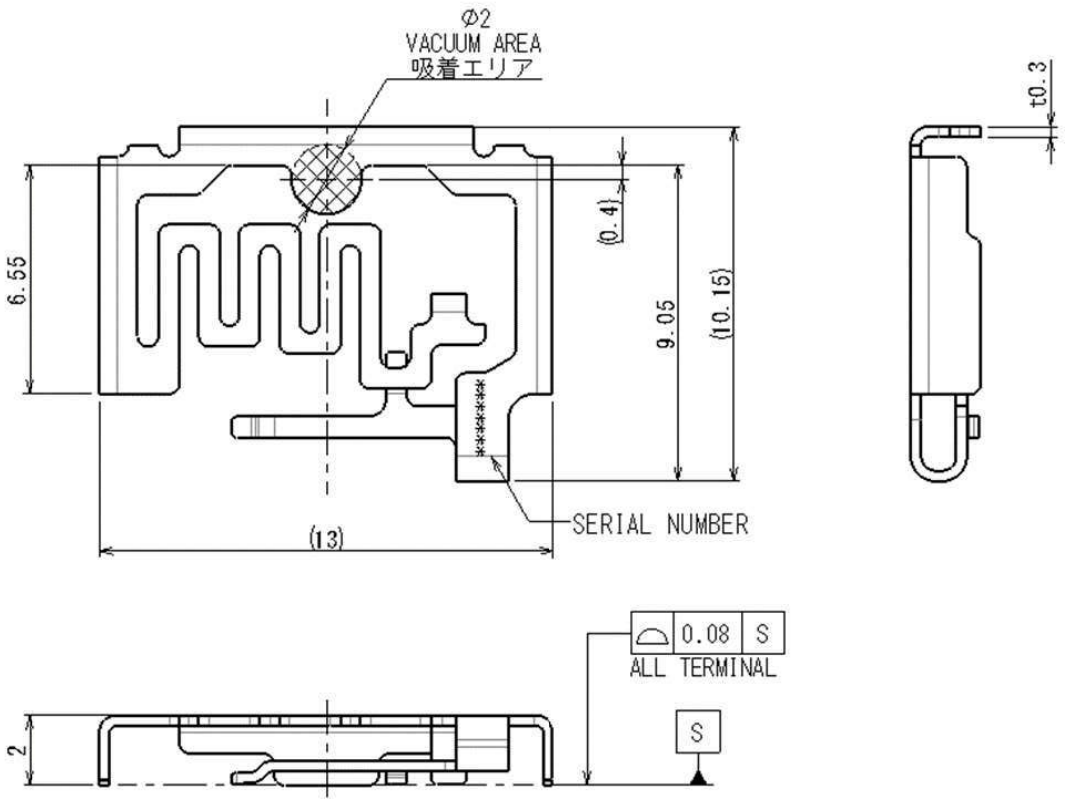


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3.2. 寸法 Dimensions

13.0 (width) x 10.15 (depth) x 2 (height) mm



3.3. 重量 Weight

0.25 g (typical)

3.4. めっき Plating

なし None

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 / 5.15 – 5.85 GHz / 5.925 – 7.125 GHz

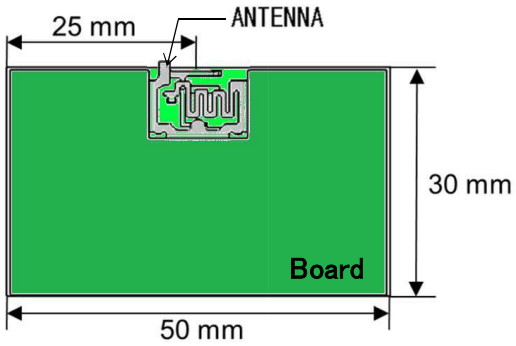
4.2. インピーダンス Impedance

50 Ω

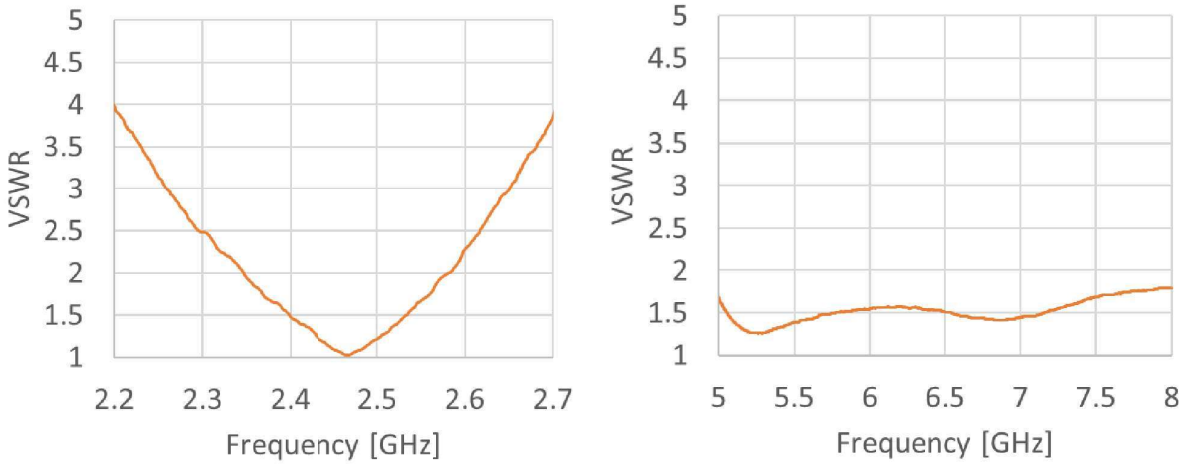
4.3. Voltage standing wave ratio (VSWR)

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 / 5.15 – 5.85 GHz / 5.925 – 7.125 GHz)



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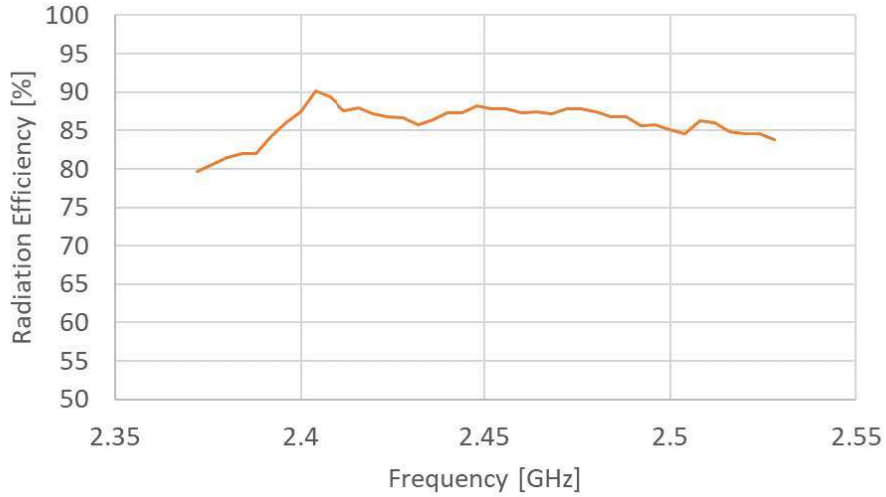
4.4 放射効率 Radiation efficiency:

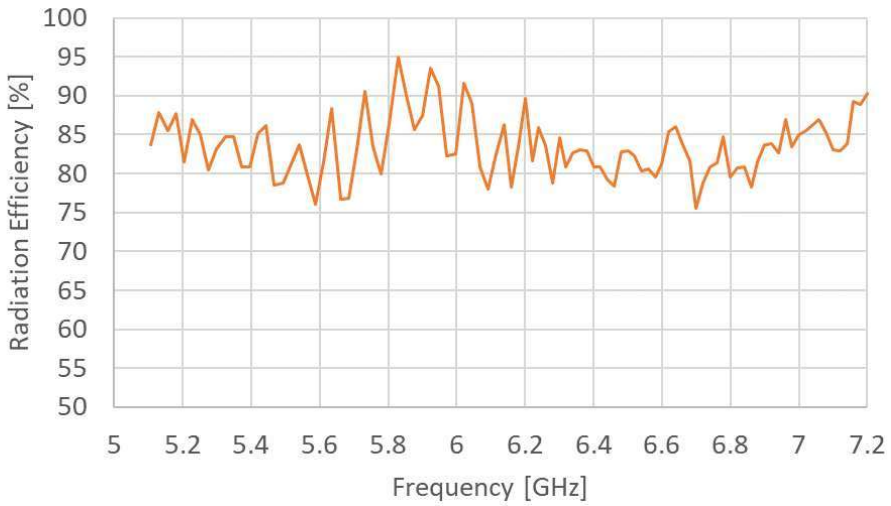
50 x 30 mmの標準基板実装時の放射効率特性例、ケーブル・配線損を除く

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

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

> 70 % (Frequency range: 5.15 – 5.85 GHz / 5.915 – 7.125 GHz)





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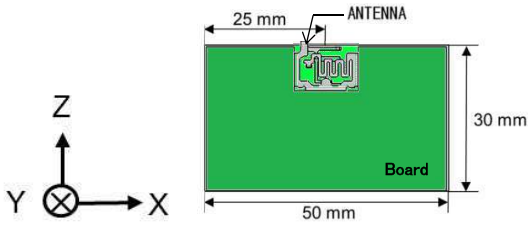
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4.5 放射パターン Radiation pattern

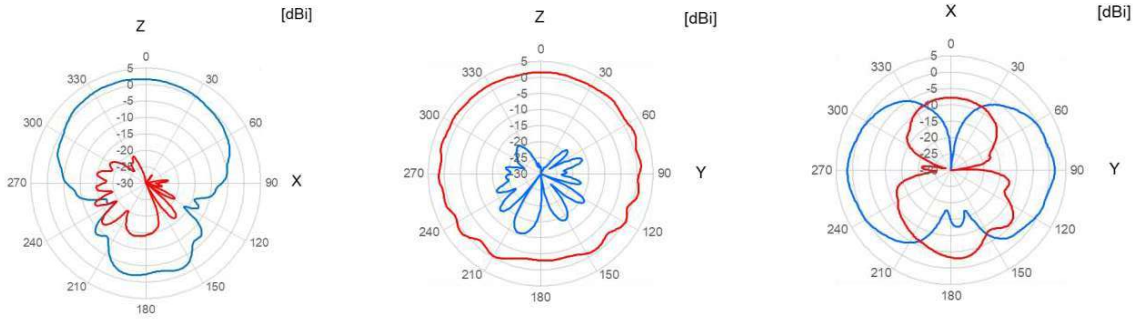
50 x 30 mm の標準基板実装時の放射パターン特性例

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

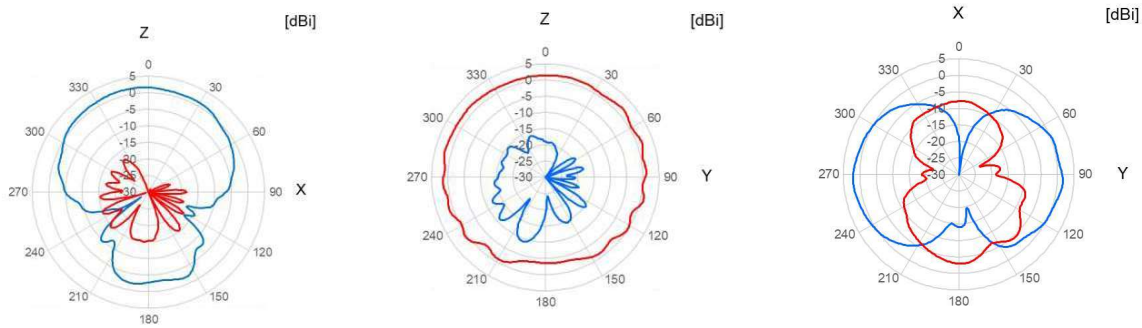


Radiation pattern

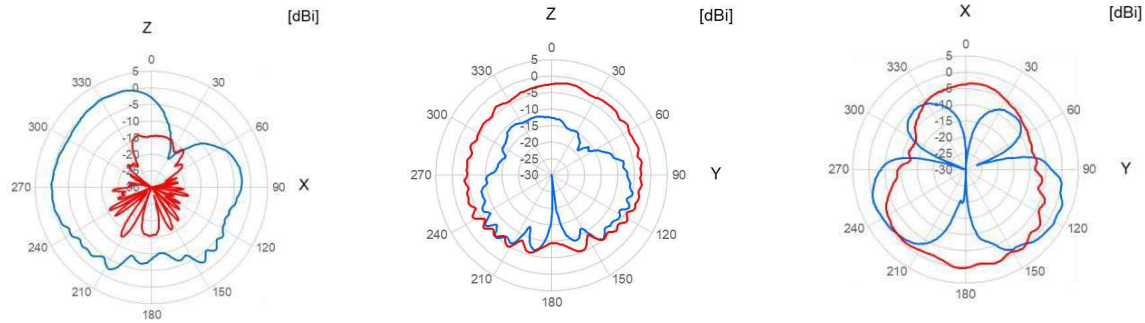
2.4 GHz



2.5 GHz



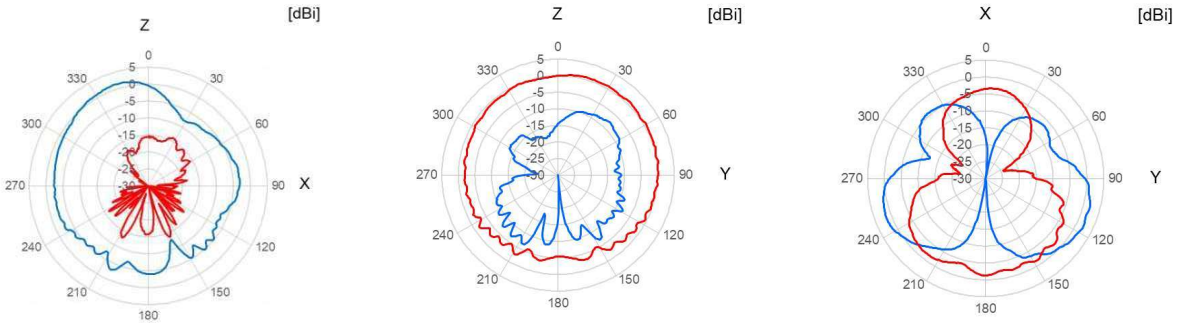
5.15 GHz



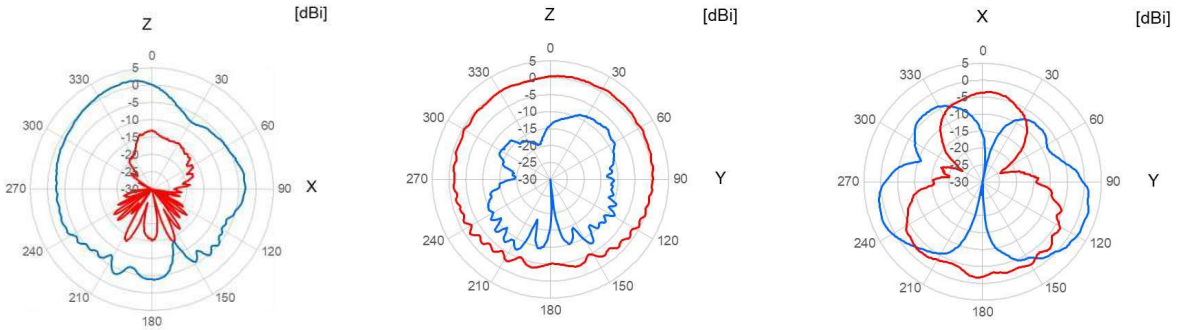
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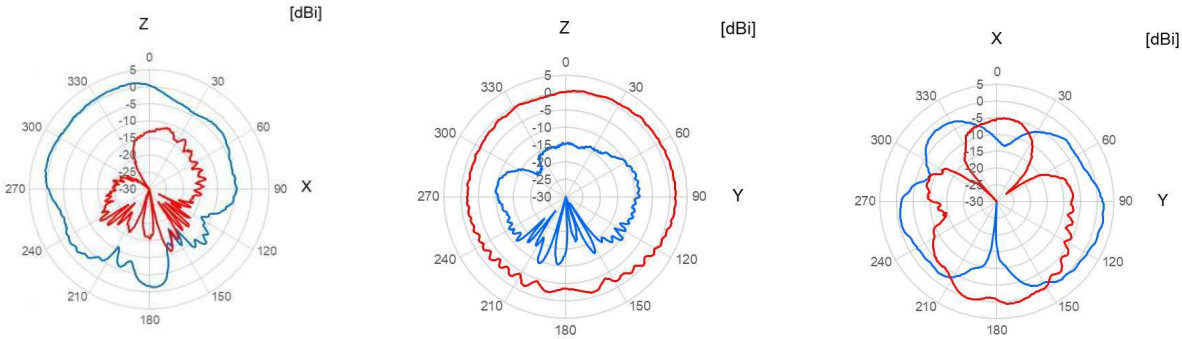
5.85 GHz



5.925 GHz



7.125 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]
2.4	2.12
2.5	2.14
5.15	1.97
5.85	2.23
5.925	2.38
7.125	2.35

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

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

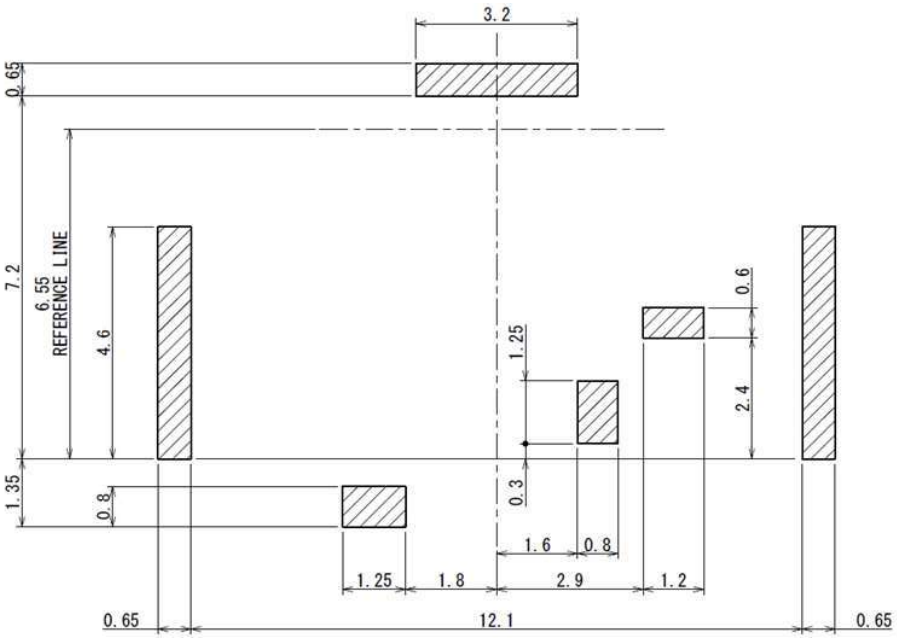
10 % to 75 %

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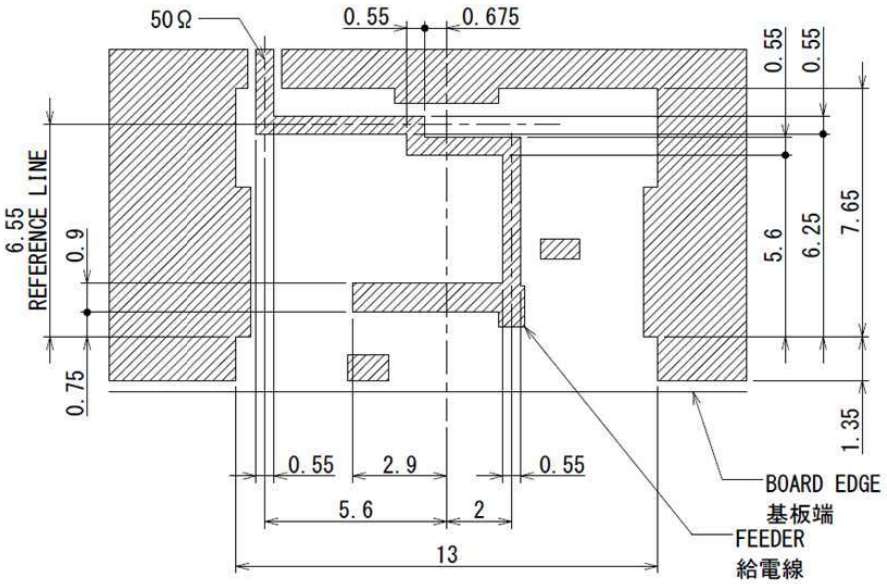
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6. 推奨ランドパターンおよび推奨基板パターン Recommended land pattern and reference board pattern



Recommended land pattern



Reference board pattern (board thickness: 1.6 mm)

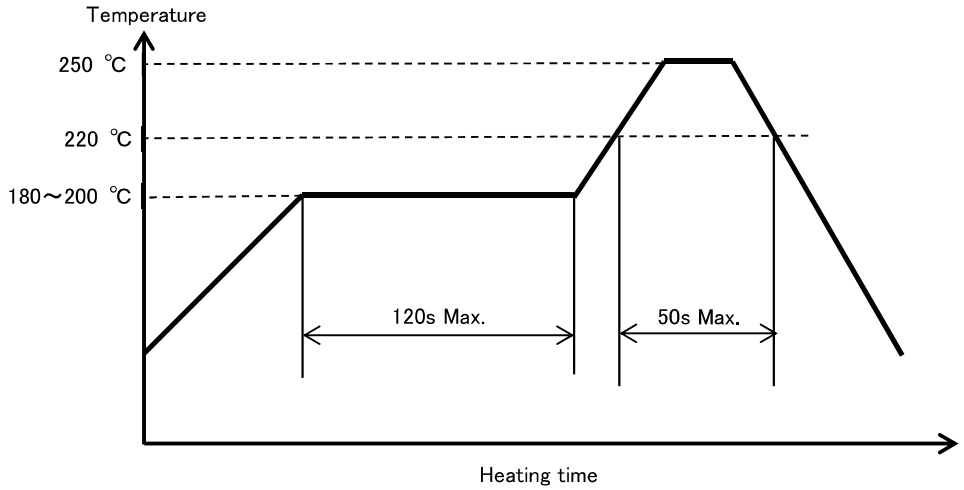
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7. 推奨リフロー温度プロファイル Recommended reflow temperature profile

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



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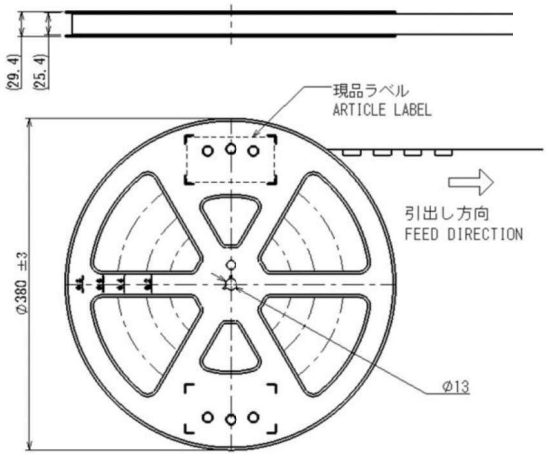
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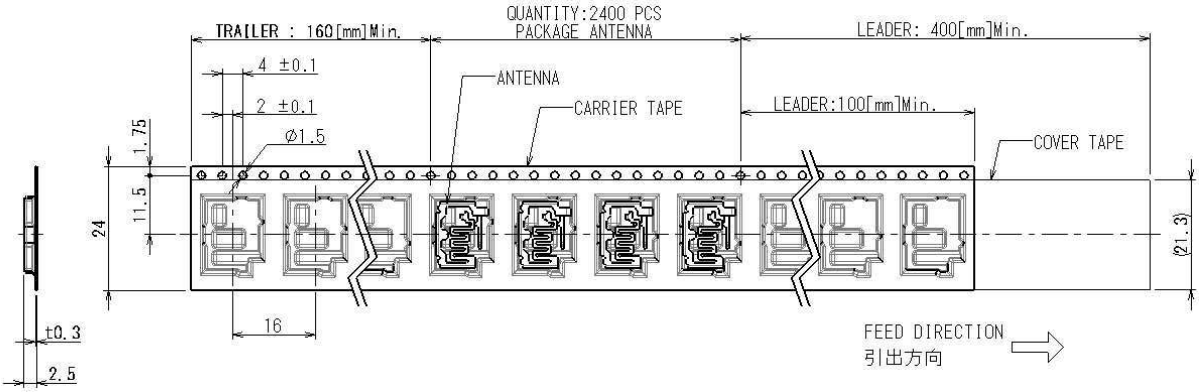
8. 梱包 Packaging

8.1. 梱包数量 Package quantity: 2,400 (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

文書番号 Document number	日付 Date	改版 Revision
GHT21-1271	30 Sep. 2021	初版 Initial version
GHT21-1271-1	08 Oct. 2021	2 版 Revision 2 -Sec. 3.1 3xSupport terminal を 2xSupport terminal に訂正 Corrected 3xSupport terminal to 2xSupport terminal.
GHT21-1271-2	13 Oct. 2021	3 版 Revision 3 -Sec. 3.1 表記の修正 Editorial changes
GHT21-1271-3	28 Jan. 2021	4 版 Revision 3 -Sec. 4.5 2.4 GHz 帯のピークゲインの値を 2.12 dBi に修正 Corrected the peak gain value at 2.4 GHz to 2.12 dBi

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