

**Description: 7020 2.4-2.5GHz Chip Antenna**
**PART NUMBER: ANT7020LL05R2400A**
**Features:**

- Size : 7.00x2.00x0.75 mm
- Omni-directional radiation
- Tape & reel automatic mounting
- Reflow process compatible
- RoHS compliant

**Applications:**

- 2.4 GHz WiFi device
- Bluetooth gadget
- Zigbee device
- ISM band equipment

**SPECIFICATIONS**
**Working Frequency**

2.45 GHz

**Bandwidth**

500 MHz(Typ.)

**Return Loss**

10 dB Max.

**Polarization**

Linear

**Azimuth Beamwidth**

Omni-directional

**Peak Gain**

2.62 dBi (Typ.)

**Impedance**

50 Ω

**Operating Temperature**

- 40~105 °C

**Maximum Power**

1 W

**Termination**

Ni / Sn (Environmentally-Friendly Leadless)

**Peak Reflow Temperature**

260°C , 10sec.

**NOTE**

1. The specification is defined on Pulse evaluation board

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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For more information:



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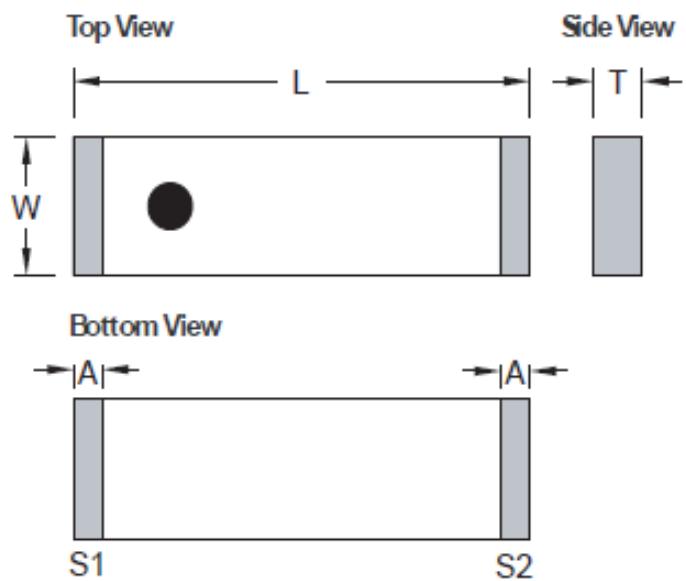
**PART NUMBER:** ANT7020LL05R2400A

**MECHANICAL DRAWING**



<b>Dimension</b>	
L (mm)	7.00 $\pm$ 0.20
W (mm)	2.00 $\pm$ 0.20
T (mm)	0.75 $\pm$ 0.20
A (mm)	0.45 $\pm$ 0.20

<b>Terminal name</b>	<b>Function</b>
S1	Feeding Point
S2	Soldering Point



YNH00120

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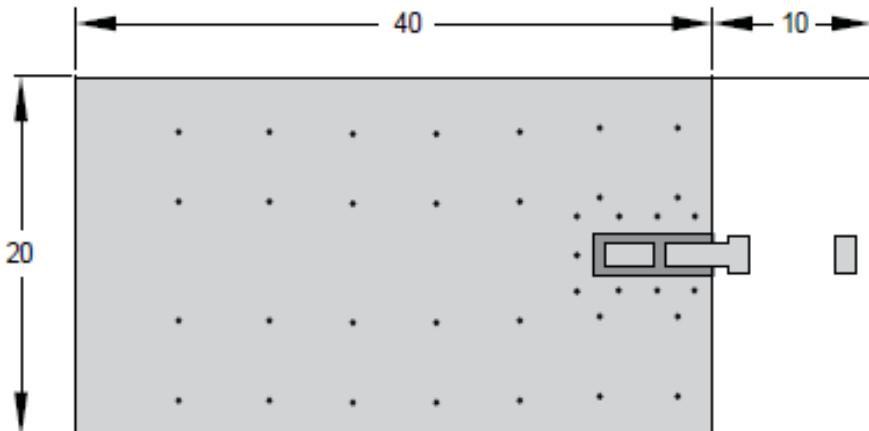
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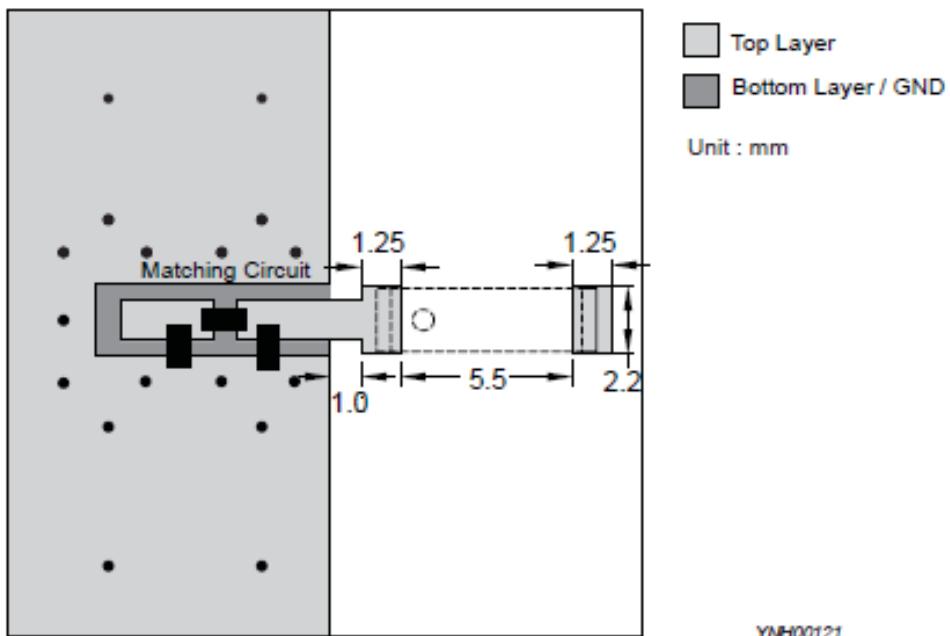
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**REFERENCE DESIGN OF EVALUATION BOARD**



Outlook and dimension of evaluation board

Unit : mm



Details of soldering Pad

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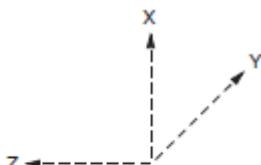
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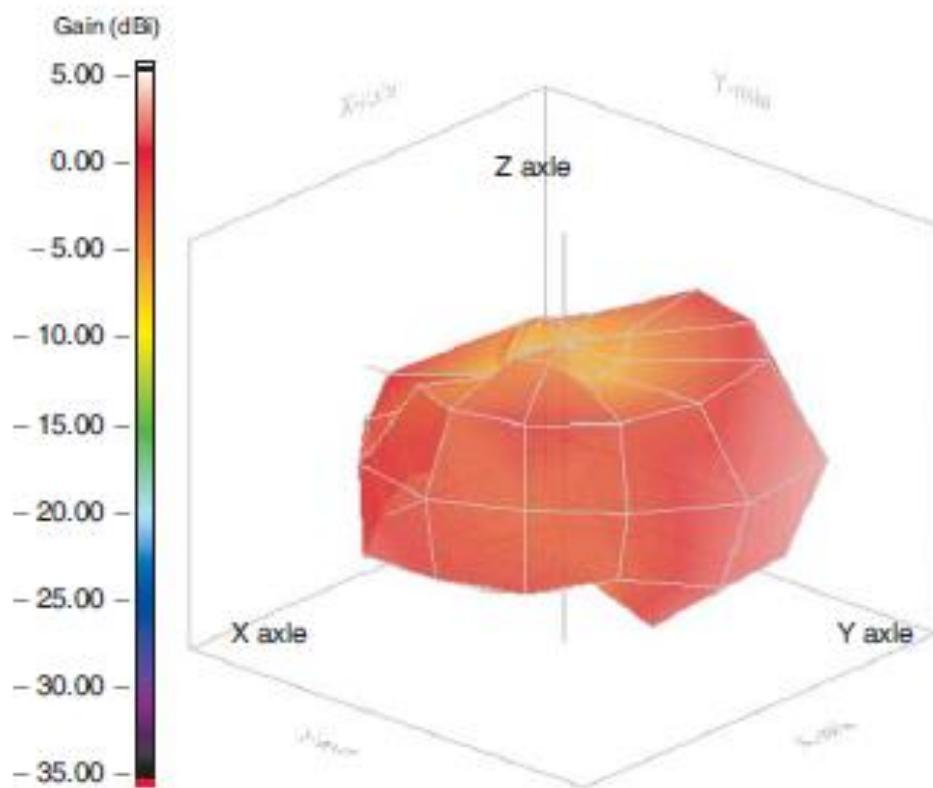
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**REFERENCE DESIGN OF EVALUATION BOARD**



Evaluation board and XYZ direction



Frequency= 2.45 GHz  
Max gain = 2.62 dBi, at (90,120)  
MEG (mean effective gain)= -2.28 dBi  
Directivity (dB) = 3.67  
Efficiency = -1.05 dB, 78.49%



Radiation pattern

YH00123

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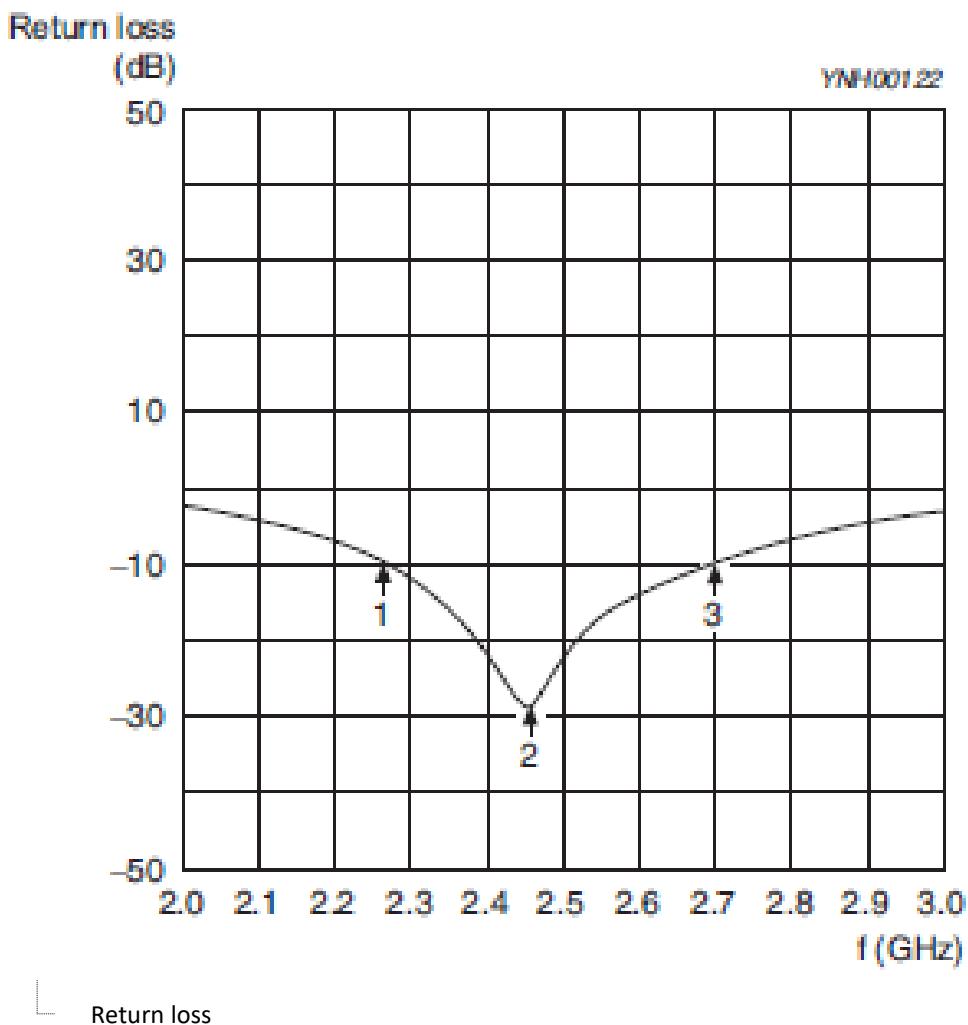
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**ELECTRICAL PERFORMANCES**



Maker data  
2.27GHz, -10dB  
2.45GHz, -28.3dB  
2.69GHz, -10dB

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**Description:** 7020 2.4-2.5GHz Chip Antenna**PART NUMBER:** ANT7020LL05R2400A**REVISION HISTORY**

Revision	Date	Description
Version 1	Nov. 20, 2020	- New issue.
Version 2	Feb. 14, 2022	- Added product image. - Modified Description, Original: Resistance to Soldering Heats, Changed: Peak Reflow Temperature.

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