

**Description: 5320 2.4GHz Chip Antenna**

**PART NUMBER: ANT5320LL45R2400A**

**Features:**

- Size : 5.3x2.0x1.3 mm
- Working Frequency : 2.4~2.5GHz
- Omni-directional Radiation
- Tape & reel automatic mounting
- Reflow process compatible
- RoHS compliant



**Applications:**

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

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

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**ELECTRICAL SPECIFICATIONS**

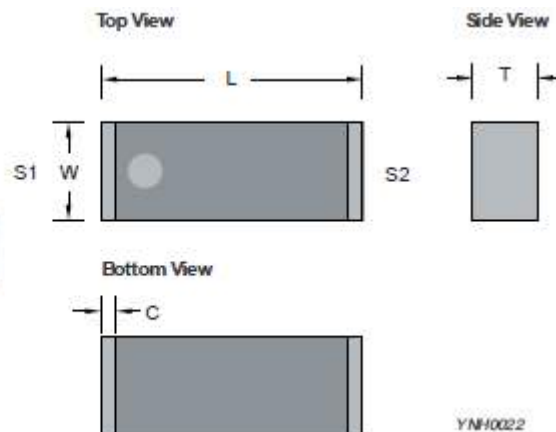
<b>Working Frequency</b>	2.45 GHz
<b>Bandwidth</b>	240 MHz(Typ.)
<b>Return Loss</b>	10.0 dB Min
<b>Polarization</b>	Linear
<b>Azimuth Beamwidth</b>	Omni-directional
<b>Peak Gain</b>	5.22 dBi(Typ.)
<b>Impedance</b>	50 Ω
<b>Operating Temperature</b>	- 40~105 °C
<b>Maximum Power</b>	1 W
<b>Termination</b>	Ni / Sn (Environmentally-Friendly Leadless)
<b>Resistance to Soldering Heats</b>	260°C , 10sec.

NOTE

1. The specification is defined on Pulse evaluation board

**MECHANICAL DRAWING**

	<b>Dimension</b>
L (mm)	5.30 ±0.20
W (mm)	2.00 ±0.20
T (mm)	1.30 ±0.20
C (mm)	0.30 ±0.20



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

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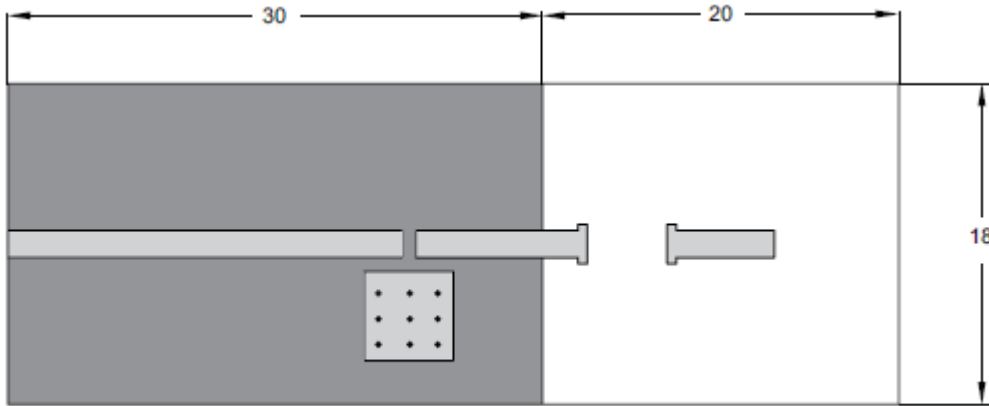
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**REFERENCE DESIGN OF EVALUATION BOARD**

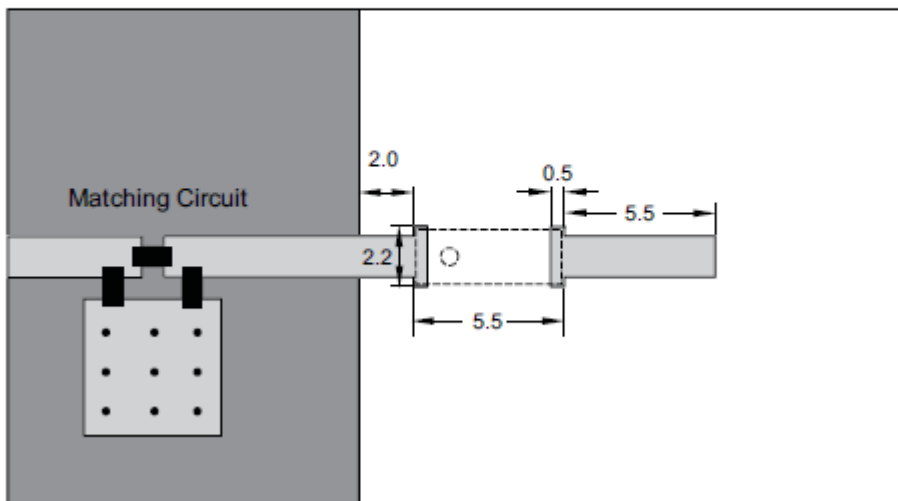


Unit : mm

Outlook and dimension of evaluation board

- Top Layer
- Bottom Layer / GND

Unit : mm



Footprint

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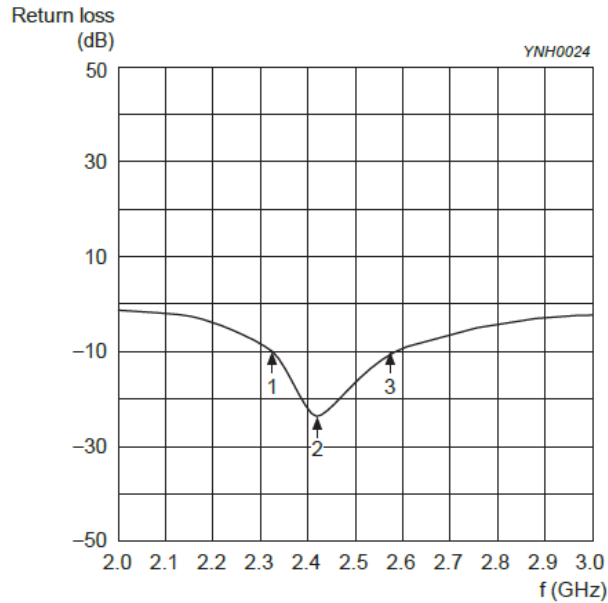
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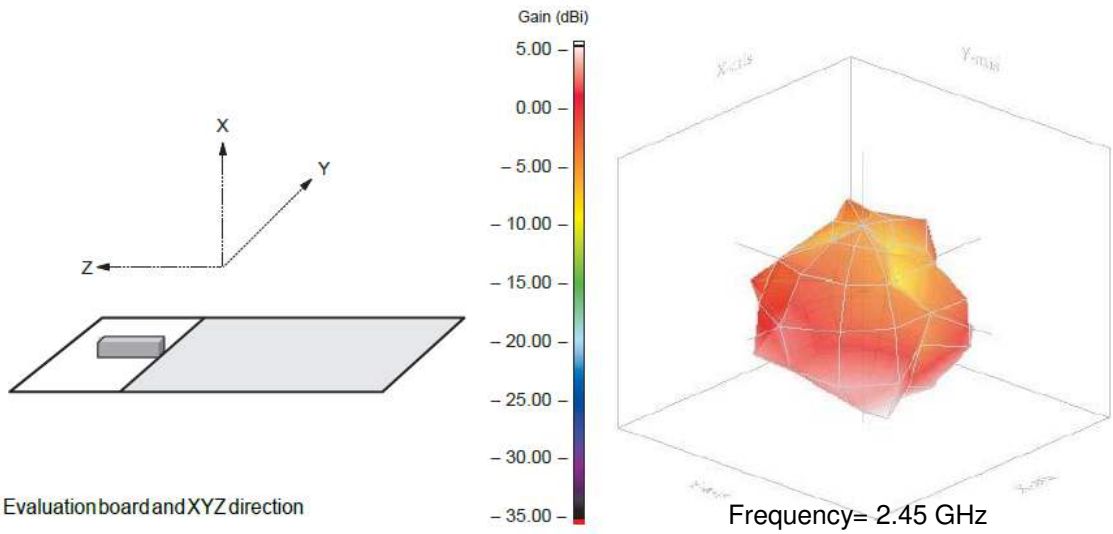
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**ELECTRICAL PERFORMANCES**



Marker data  
 1. 2.33GHz, -10dB  
 2. 2.42GHz, -24dB  
 3. 2.57GHz, -10dB

Return loss



Radiation pattern

Frequency= 2.45 GHz  
 Max gain = 5.22 dBi, at (180, 0)  
 MEG (mean effective gain)= -0.83  
 dBi Directivity (dB) = 7.40  
 Efficiency = -1.18 dB, 76.30 %

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### REVISION HISTORY

Revision	Date	Description
Version 1	Oct. 12, 2020	- New issue

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