

**Description:** 5320 2.4G&5GHz Chip Antenna

**PART NUMBER: ANT5320LL04R2455A**

### Features:

- Size : 5.3x2.0x1.4 mm
- Omni-directional Radiation
- Dual-band design
- Tape & reel automatic mounting
- Reflow process compatible
- RoHS compliant



### Applications:

- 2.4&5GHz WiFi 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**

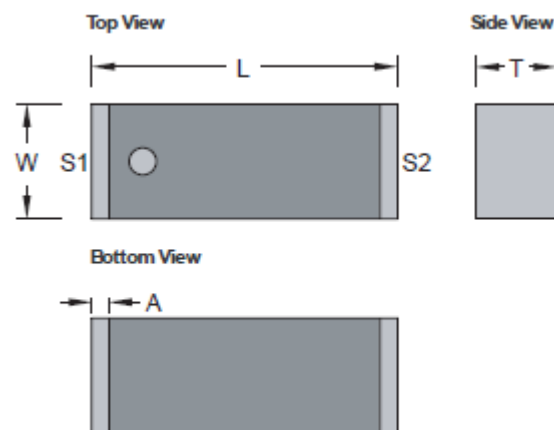
<b>Working Frequency</b>	2.45 G / 5.5GHz
<b>Bandwidth</b>	150M / 900MHz(Typ.)
<b>Return Loss</b>	6.5 dB Min
<b>Polarization</b>	Linear
<b>Azimuth Beamwidth</b>	Omni-directional
<b>Peak Gain</b>	2.09 / 4.32 dBi(Typ.)
<b>Impedance</b>	50 $\Omega$
<b>Operating Temperature</b>	- 40~105 $^{\circ}\text{C}$
<b>Maximum Power</b>	1 W
<b>Termination</b>	Ni / Sn (Environmentally-Friendly Leadless)
<b>Resistance to Soldering Heats</b>	260 $^{\circ}\text{C}$ , 10sec.

**NOTE**

1. The specification is defined on Pulse evaluation board

**MECHANICAL DRAWING**

	<b>Dimension</b>
L (mm)	$5.30 \pm 0.20$
W (mm)	$2.00 \pm 0.20$
T (mm)	$1.40 \pm 0.30$
A(mm)	$0.40 \pm 0.20$



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

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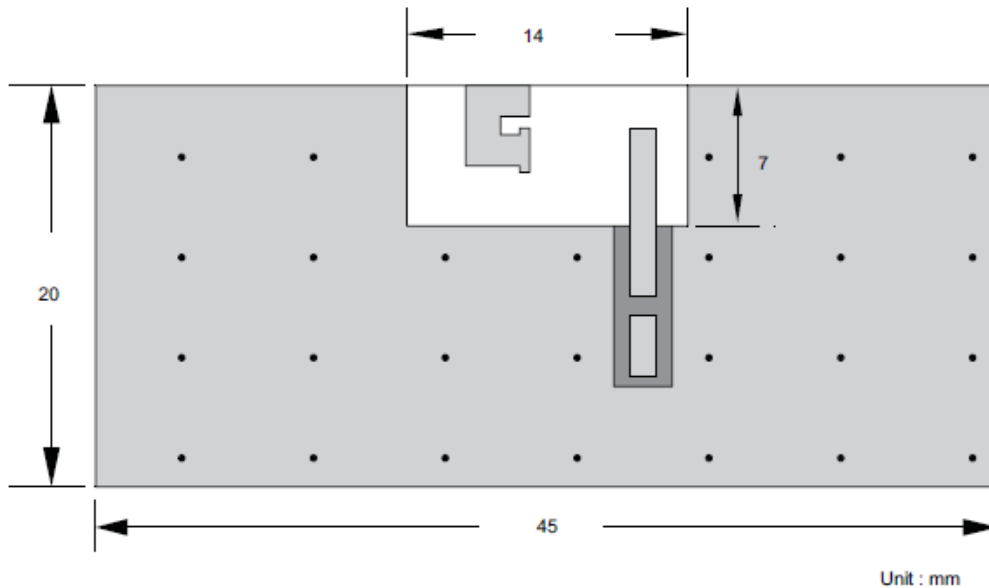
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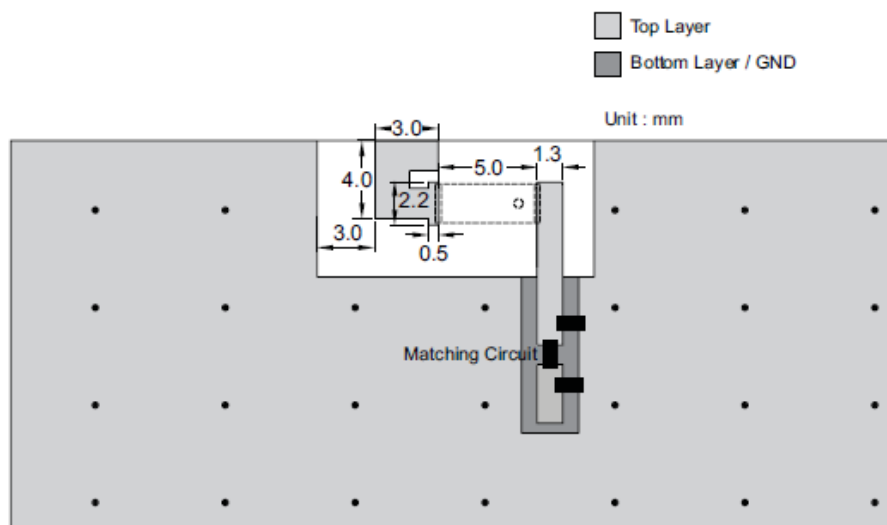
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## REFERENCE DESIGN OF EVALUATION BOARD



Outlook and dimension of evaluation board



Details of soldering Pad

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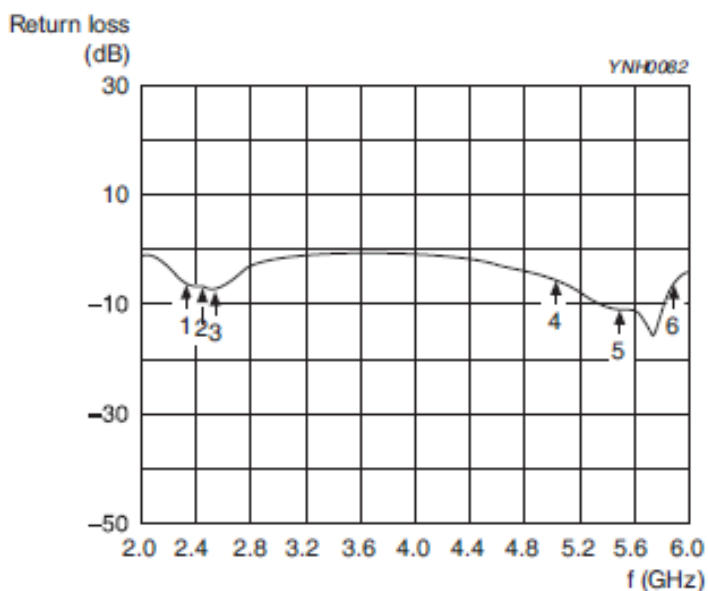
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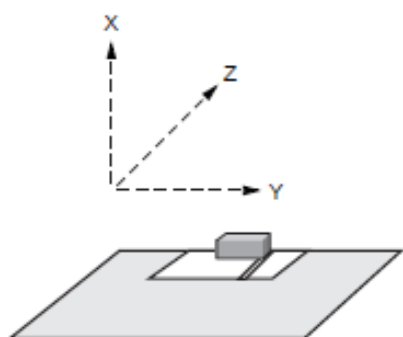
### ELECTRICAL PERFORMANCES



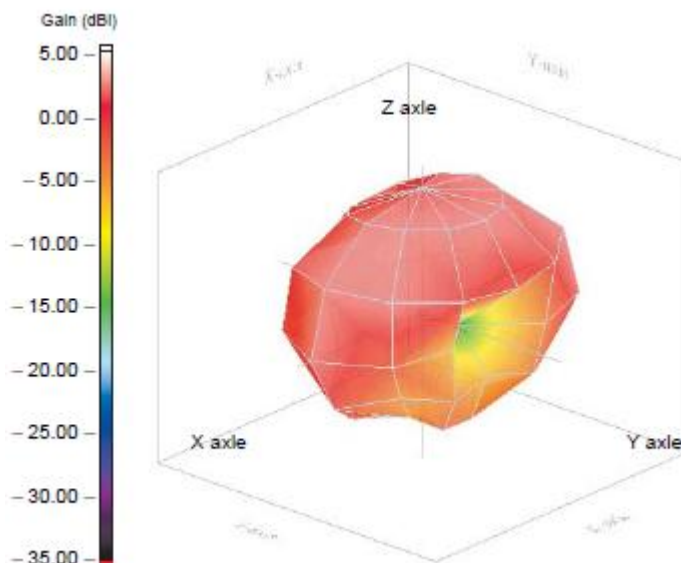
#### Marker data

1. 2.37GHz , -6.5dB
2. 2.45GHz , -7.6dB
3. 2.52GHz , -6.5dB
4. 5.05GHz , -6.5dB
5. 5.00GHz , -11.9dB
6. 9.5GHz , -6.5dB

#### Return loss



Evaluation board and XYZ direction



#### Radiation pattern

Max gain = 2.09 dBi, at (60, 150)  
MEG (mean effective gain) = -1.18 dBi  
Directivity (dB) = 3.58  
Efficiency = -1.49 dB, 71.01 %

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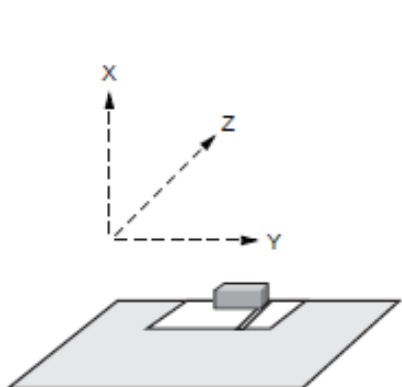
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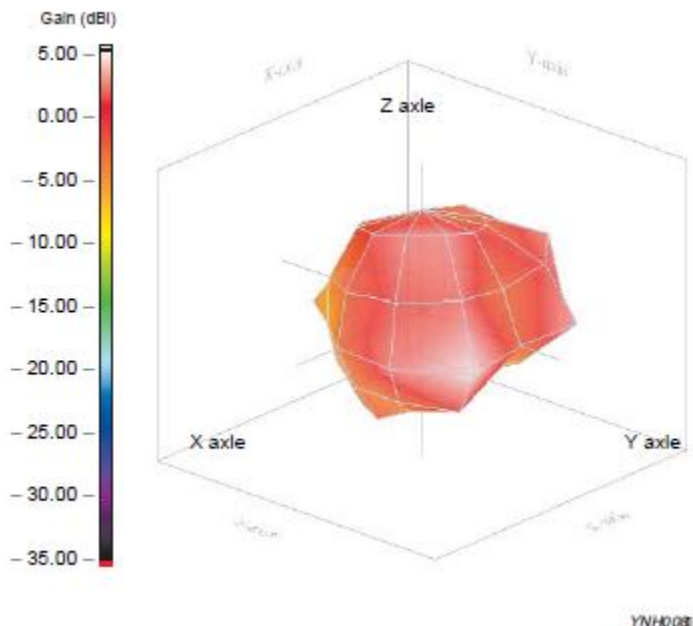
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## ELECTRICAL PERFORMANCES



Evaluation board and XYZ direction



Radiation pattern

Frequency= 5.5 GHz  
Max gain = 4.32 dBi, at (90, 60)  
MEG (mean effective gain)= -2.57 dBi  
Directivity (dB) = 6.36  
Efficiency = -2.04 dB, 62.52 %

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### REVISION HISTORY

Revision	Date	Description
Version 1	Oct. 13, 2020	- New issue

# Mouser Electronics

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