

# DATA SHEET

## WIRELESS COMPONENTS

Ceramic Chip Antenna  
ANT5320LL24R2400A

2.4 - 2.5 GHz  
5320 Series



FEATURES

- Compact size
- 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

ORDERING INFORMATION

All part numbers are identified by the series, packing type, material, size, antenna type, working frequency and packing quantity.

**PART NUMBER****ANT 5320 L L24 R 2400A**

(1) (2) (3) (4) (5) (6)

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**(1) PRODUCT**

ANT = Antenna

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**(2) SIZE**

5320= 5.3 × 2.0 mm

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**(3) ANTENNA TYPE**

L,F,A = Chip Antenna

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**(4) SERIAL NO.**

L24

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**(5) PACKING STYLE**

R = Tape and Reel

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**(6) WORKING FREQUENCY**

2400 = 2.4 GHz

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**PHYCOMP CTC**

CAN4311753242452K

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**I2NC**431175324245

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**SPECIFICATION**

Table 1

| DESCRIPTION                   | VALUE                                       |
|-------------------------------|---|
| Centre Frequency              | 2.45 GHz                                    |
| Bandwidth                     | 84 MHz (Typ.)                               |
| Polarization                  | Linear                                      |
| Azimuth Beamwidth             | Omni-directional                            |
| Peak Gain                     | 2.78 dBi (Typ.)                             |
| Impedance                     | 50 Ω  |
| Operating Temperature         | -40~105 °C                                  |
| Maximum Power                 | 1 W   |
| Termination                   | Ni / Sn (Environmentally-Friendly Leadless) |
| Resistance to Soldering Heats | 260°C , 10sec.                              |

**NOTE**

I. The specification is defined on Yageo evaluation board

**DIMENSIONS**

Table 2 Machinical Dimension

|        | DIMENSION  |
|--------|------------|
| L (mm) | 5.30 ±0.10 |
| W (mm) | 2.00 ±0.10 |
| T (mm) | 1.20 ±0.10 |

Table 3 Termination Configuration

| TERMINAL NAME | FUNCTION      |
|---------------|---------------|
| S1            | Feeding Point |
| S2            | Ground Point  |
| S3            | Ground Point  |

**OUTLINES**

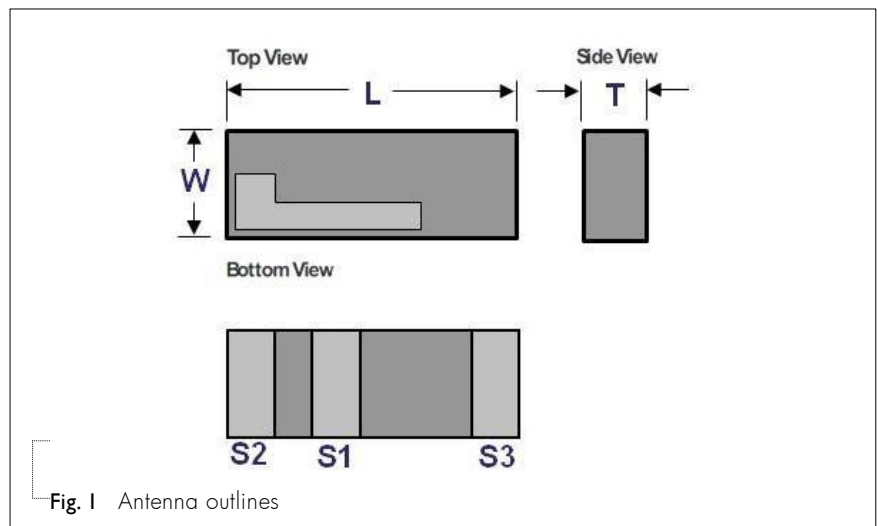


Fig. 1 Antenna outlines

REFERENCE DESIGN OF EVALUATION BOARD

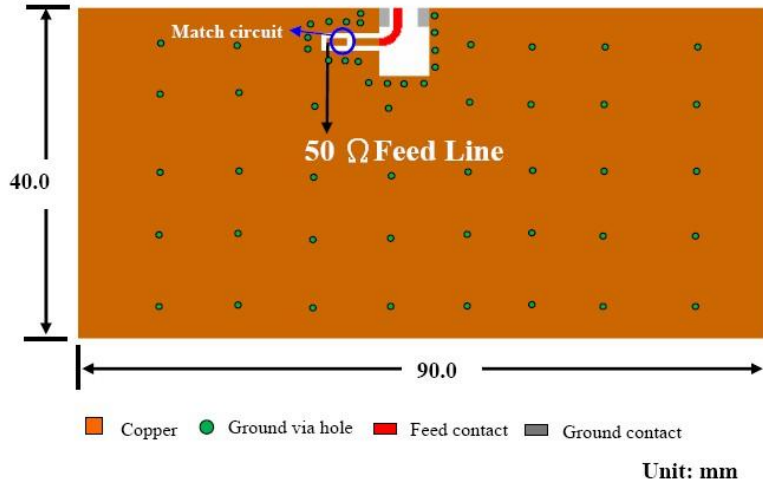


Fig. 2 Outlook and dimension of evaluation board

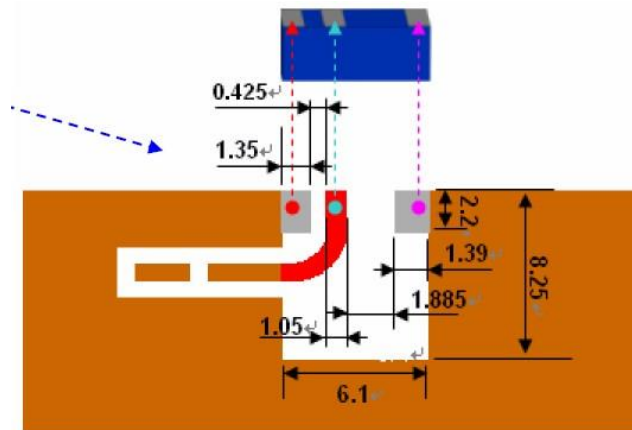


Fig. 3 Dimension of footprint

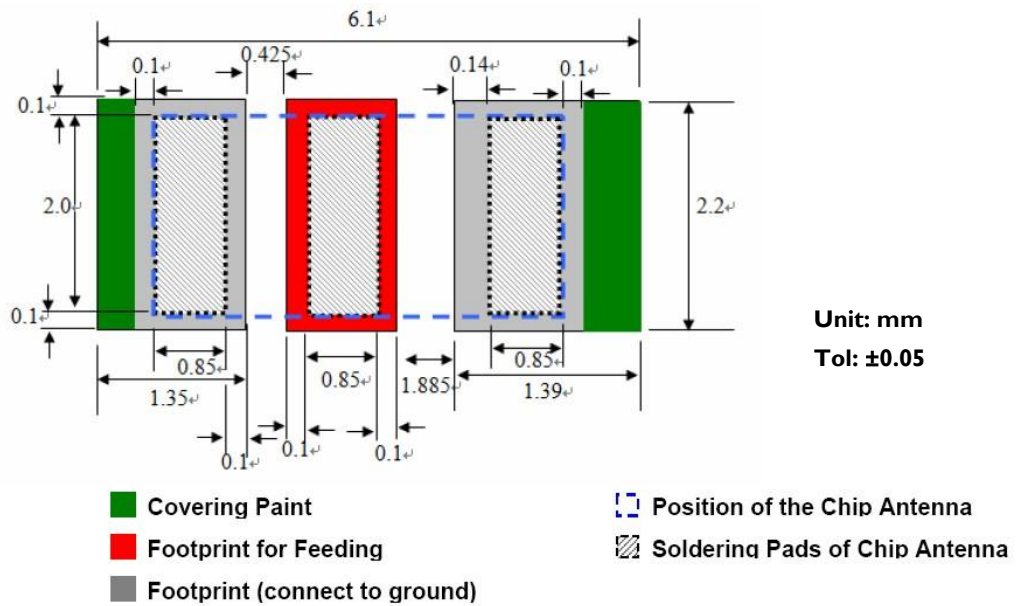
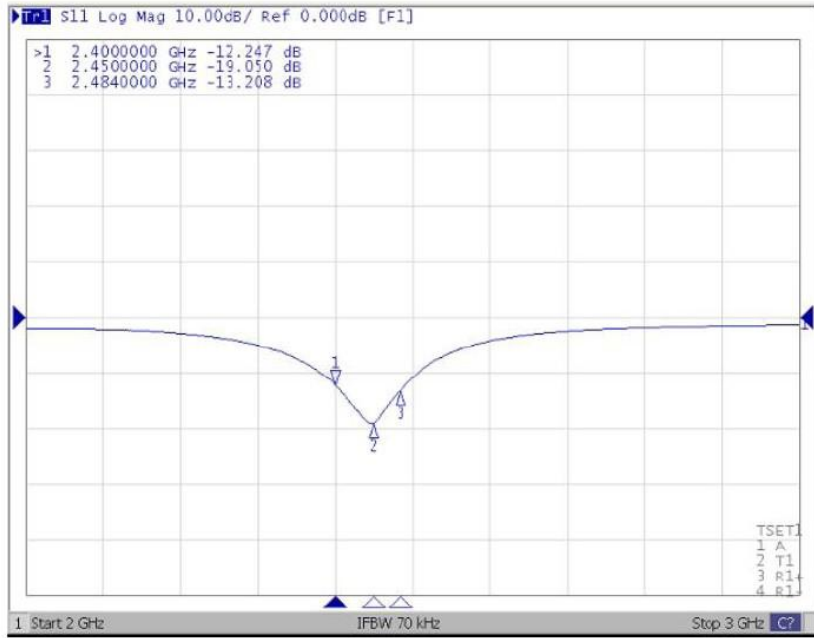
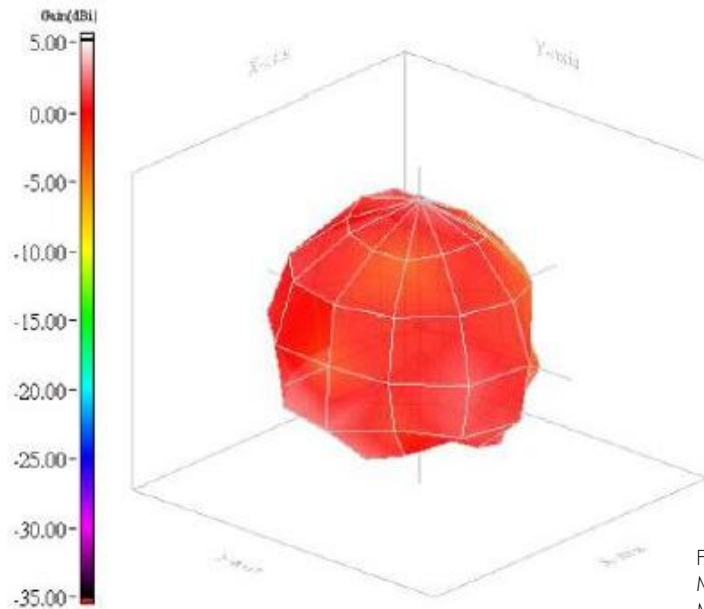


Fig. 4 Details of soldering pad

**ELECTRICAL PERFORMANCES**



**Fig. 5** Return loss



Frequency= 2.45 GHz  
 Max gain = 2.78dBi, at (150,150)  
 MEG (mean effective gain)= -0.76 dBi  
 Directivity (dB) = 3.61  
 Efficiency = -0.83dB, 82.66 %

**Fig. 6** Radiation pattern

**REVISION HISTORY****REVISION    DATE            CHANGE NOTIFICATION    DESCRIPTION**

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|           |                |  |   |
|-----------|----------------|--|---|
| Version 1 | May. 9, 2017 - |  | - Includes Terminal configuration chart |
|-----------|----------------|--|---|

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|-----------|-----------------|--|--|
| Version 0 | Jan. 23, 2013 - |  | - New data sheet for SMD type antenna, 2.45GHz application, 5320 series. |
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