

# DATA SHEET

## WIRELESS COMPONENTS

Ceramic Chip Antenna  
ANT5320LL07R1524A

2.4GHZ AND GPS  
5320 Series



FEATURES

- Cover dual frequency bands in 2.4 & 1.575 GHz
- Compact size
- Omni-directional Radiation
- Tape & reel automatic mounting
- Reflow process compatible
- RoHS compliant

APPLICATIONS

- Tablet
- Navigation device
- Telematics box
- Fleet management
- 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 L07 R 1524A**  
 (1) (2) (3) (4) (5) (6)

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**(1) PRODUCT**

ANT = Antenna

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**(2) SIZE**

5320 = 5.3 x 2.0 mm

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**(3) ANTENNA TYPE**

L,F,A = Chip Antenna

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**(4) SERIAL NO.**

L07

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**(5) PACKING STYLE**

R = Tape and Reel

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**(6) WORKING FREQUENCY**

1524 = 1.575 / 2.4GHz

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**PHYCOMP CTC**

CAN4311753071522K

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**I2NC**

431175307152

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**SPECIFICATION**

Table 1

DESCRIPTION	VALUE
Centre Frequency	1.575 GHz / 2.45 GHz
Bandwidth	20 MHz (Typ.) / 84 MHz (Typ.)
Return Loss	10 dB min
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	2.47 dBi / 2.04 dBi
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**

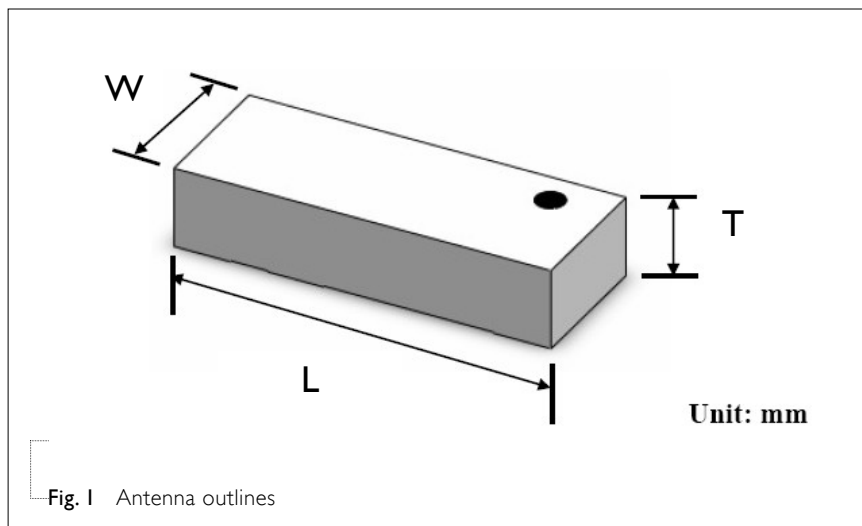
I. The specification is defined on Yageo evaluation board

**DIMENSIONS**

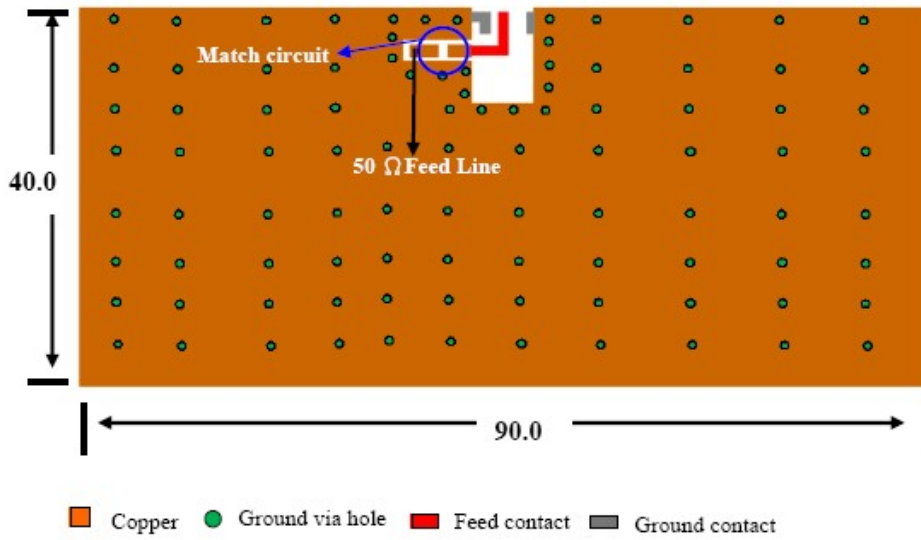
Table 2 Machinical Dimension

	DIMENSION
L (mm)	5.3±0.15
W (mm)	2.0 ±0.15
T (mm)	1.2 ±0.10

**OUTLINES**



REFERENCE DESIGN OF EVALUATION BOARD



Unit: mm

Fig. 2 Outlook and dimension of evaluation board

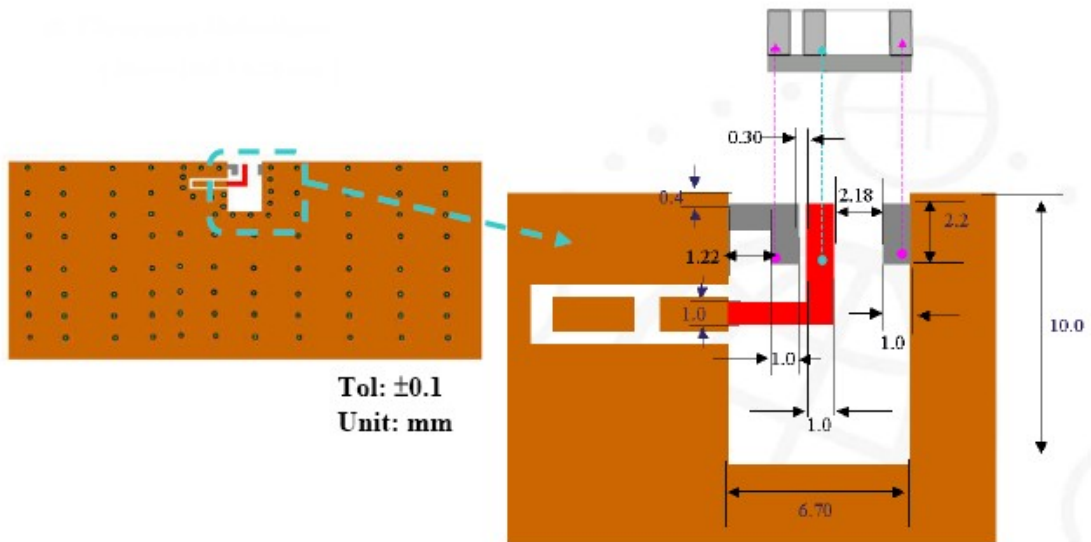
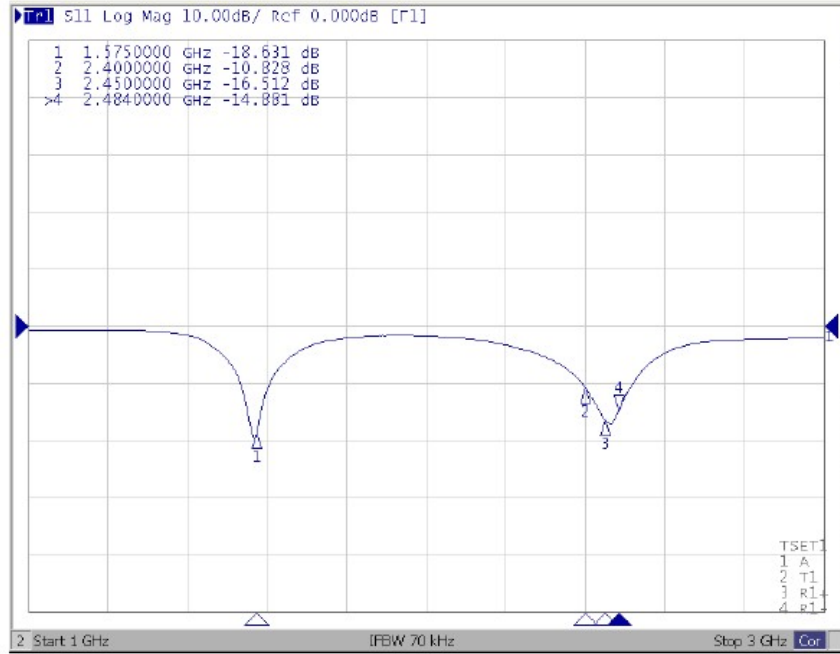


Fig. 3 Details of soldering Pad

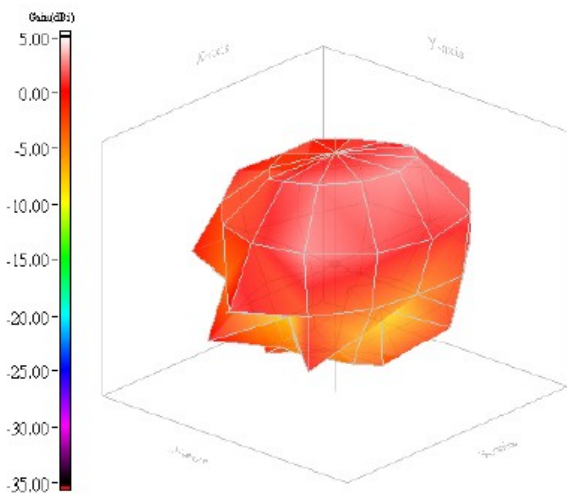
**ELECTRICAL PERFORMANCES**



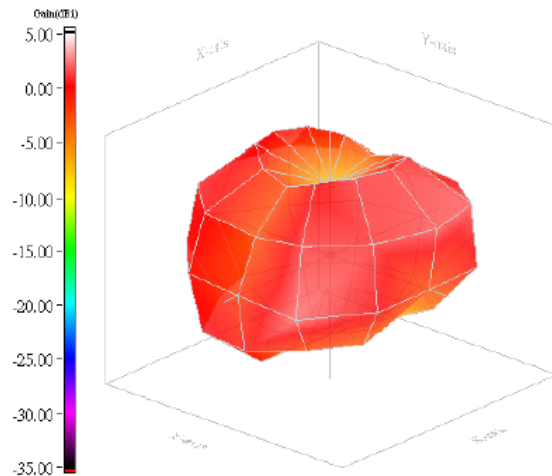
**Fig. 4** Return loss

Model name: 5320 combo C\_20100517  
 Test mode: 3D  
 Test frequency / Polarization: 1575.00 MHz / Vector  
 Test date: 2010/5/17

Model name: 5320 combo C\_20100517  
 Test mode: 3D  
 Test frequency / Polarization: 2450.00 MHz / Vector  
 Test date: 2010/5/17



Max gain= 2.47dBi, at (60, 30)  
 MEG(mean effective gain)= -1.58dBi  
 Directivity(dB)= 3.93  
 Efficiency= -1.46dB, 71.50%



Max gain= 2.04dBi, at (90, 30)  
 MEG(mean effective gain)= -2.41dBi  
 Directivity(dB)= 3.30  
 Efficiency= -1.32dB, 73.73%

**Fig. 5** Radiation pattern

REVISION HISTORY**REVISION    DATE            CHANGE NOTIFICATION    DESCRIPTION**

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Version 0	Apr. 26, 2013	-	- New data sheet for Ceramic Chip Antenna, 2.4 GHz and GPS, size 5.3x2.0
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