

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)

(1) PRODUCT

ANT = Antenna

(2) SIZE

5320 = 5.3 x 2.0 mm

(3) ANTENNA TYPE

L,F,A = Chip Antenna

(4) SERIAL NO.

L07

(5) PACKING STYLE

R = Tape and Reel

(6) WORKING FREQUENCY

1524 = 1.575 / 2.4GHz

PHYCOMP CTC

CAN4311753071522K

I2NC

431175307152

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

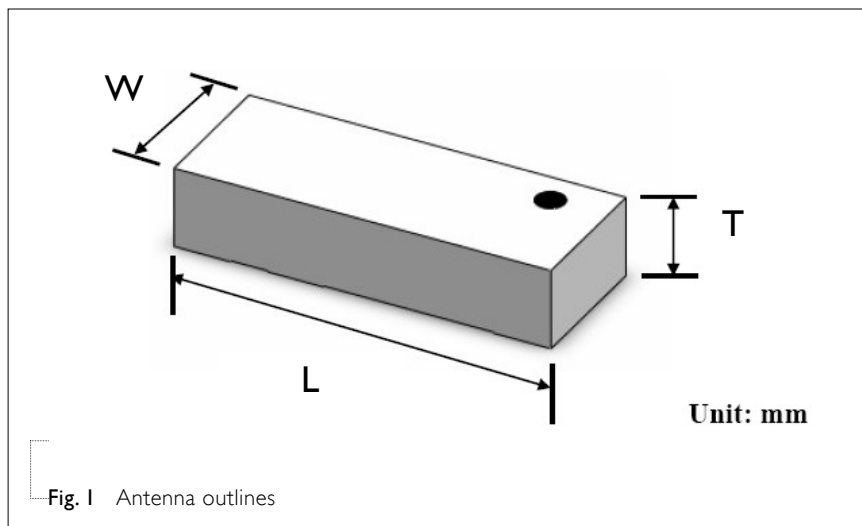
I. The specification is defined on Yageo evaluation board

DIMENSIONS

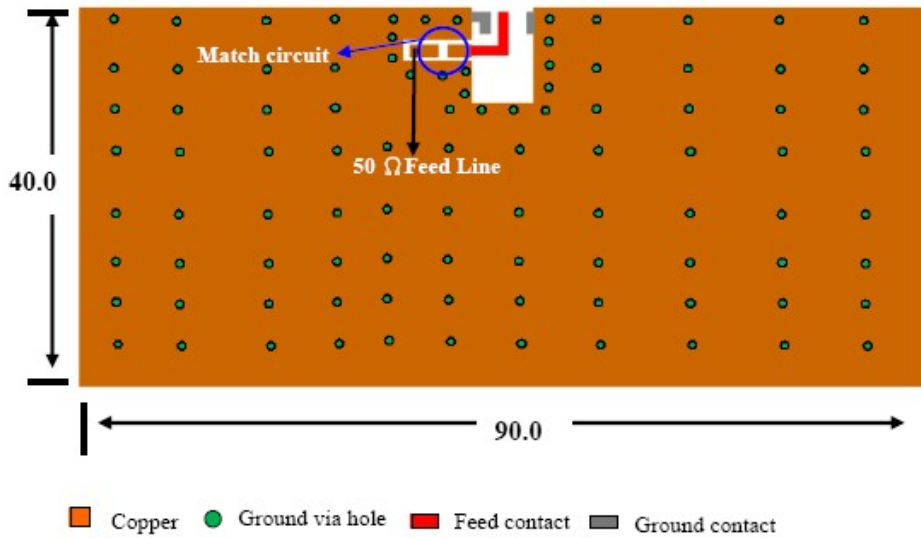
Table 2 Machinical Dimension

	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

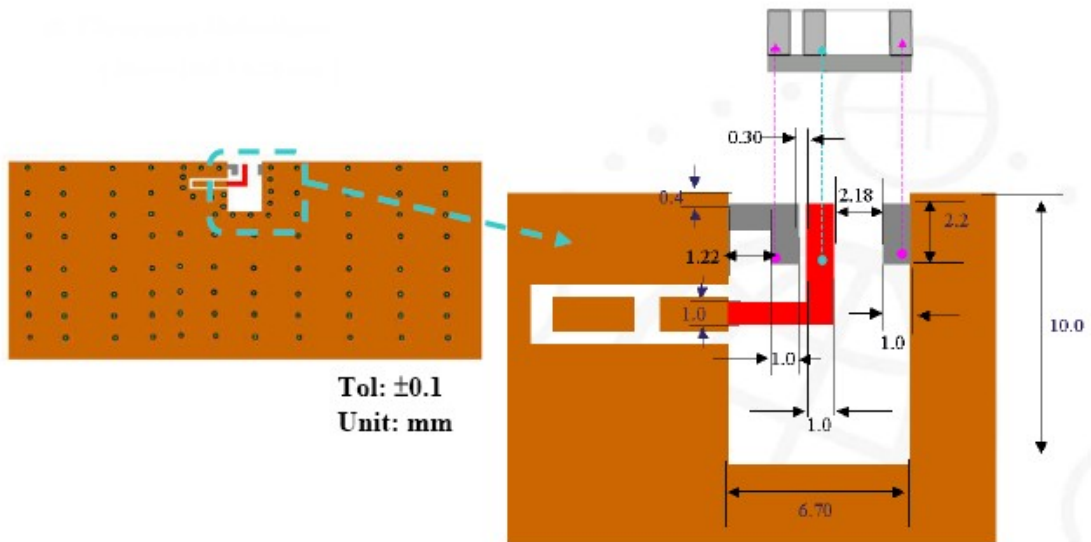


Fig. 3 Details of soldering Pad

ELECTRICAL PERFORMANCES

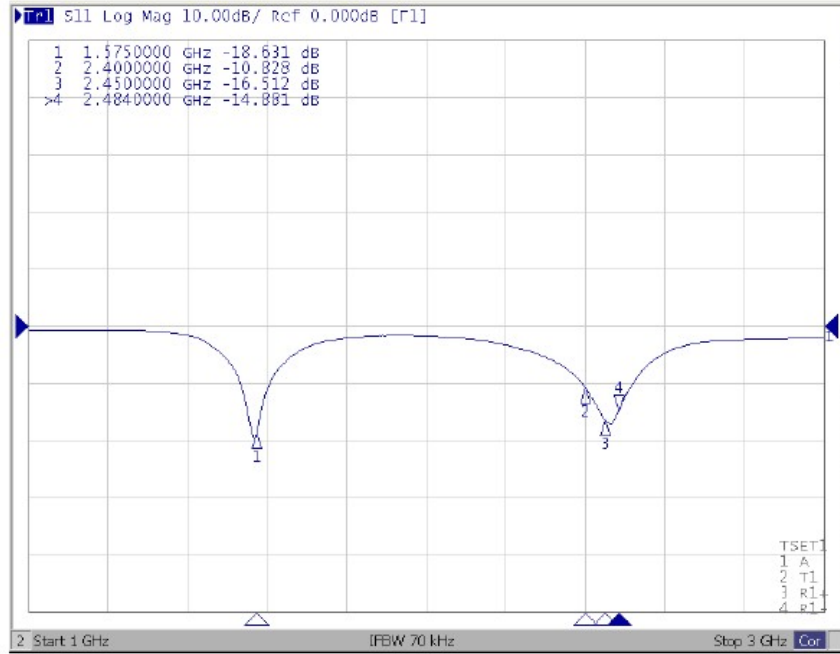
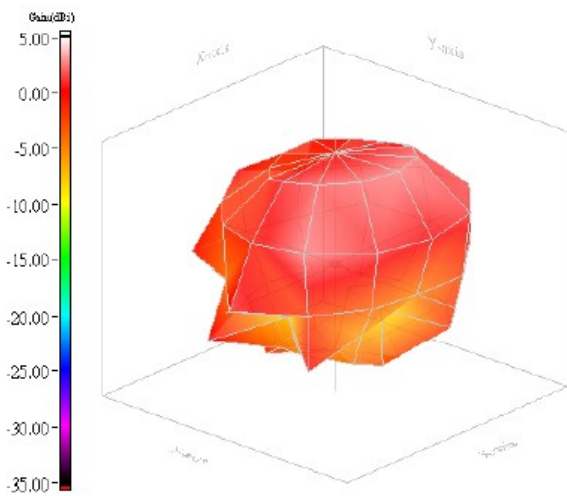
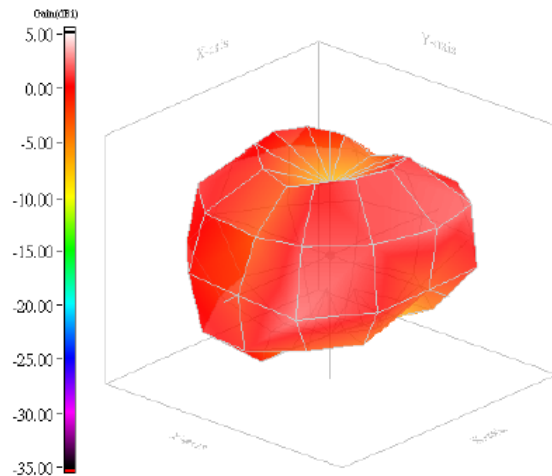


Fig. 4 Return loss

Model name 5320 combo C_20100517	Test mode 3D	Model name 5320 combo C_20100517	Test mode 3D
Test frequency / Polarization 1575.00 MHz / Vector	Test date 2010/5/17	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 HISTORYREVISION DATE CHANGE NOTIFICATION DESCRIPTION

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