Innovative Service Around the Globe YAGEO

DATA SHEET

WIRELESS COMPONENTS

Ceramic Chip Antenna
ANT5320LL24R2400A

2.4 - 2.5 GHz
5320 Series



YAGEO Phycomp

Product Specification – February 23, 2013 V.0



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)

(1) PRODUCT

ANT = Antenna

(2) SIZE

5320= 5.3 × 2.0 mm

(3) ANTENNA TYPE

L,F,A = Chip Antenna

(4) SERIAL NO.

L24

(5) PACKING STYLE

R = Tape and Reel

(6) WORKING FREQUENCY

2400 = 2.4 GHz

PHYCOMP CTC

CAN431175324245K

12NC

431175324245

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 ℃
Maximum Power	1 W
Termination	Ni / Sn (Environmentally-Friendly Leadless)
Resistance to Soldering Heats	260℃ , 10sec.

NOTE

1. 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

OUTLINES

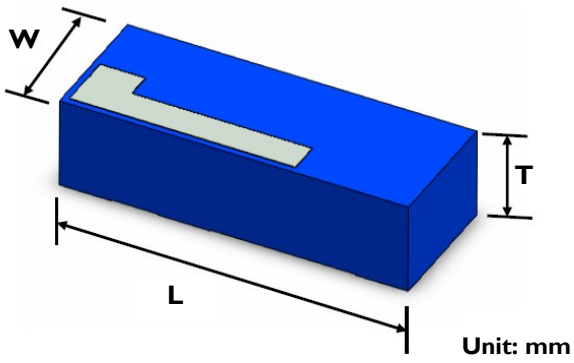


Fig. 1 Antenna outlines

REFERENCE DESIGN OF EVALUATION BOARD

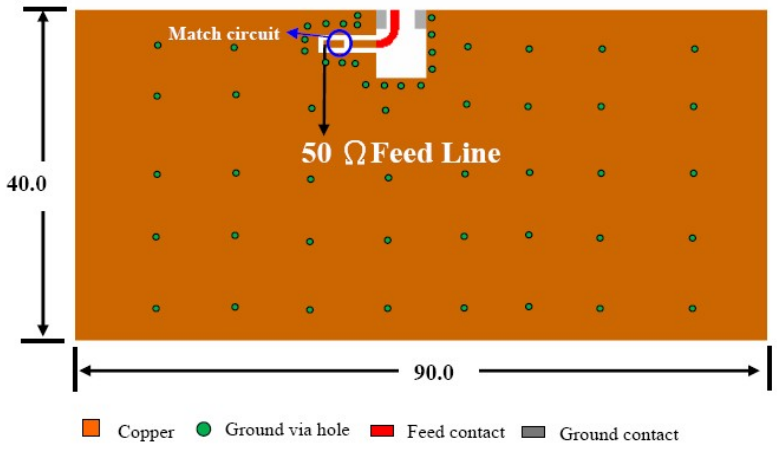


Fig. 2 Outlook and dimension of evaluation board

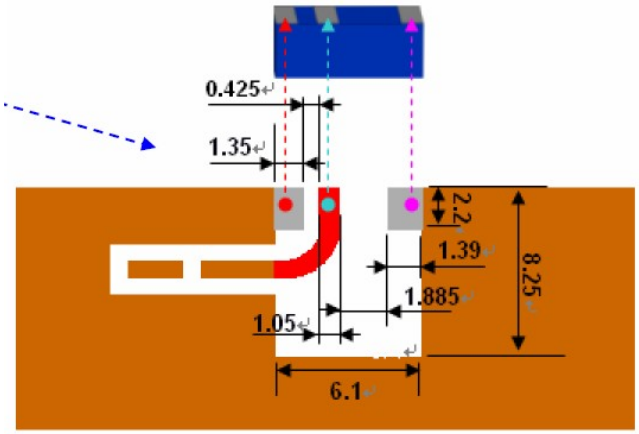


Fig. 3 Dimension of footprint

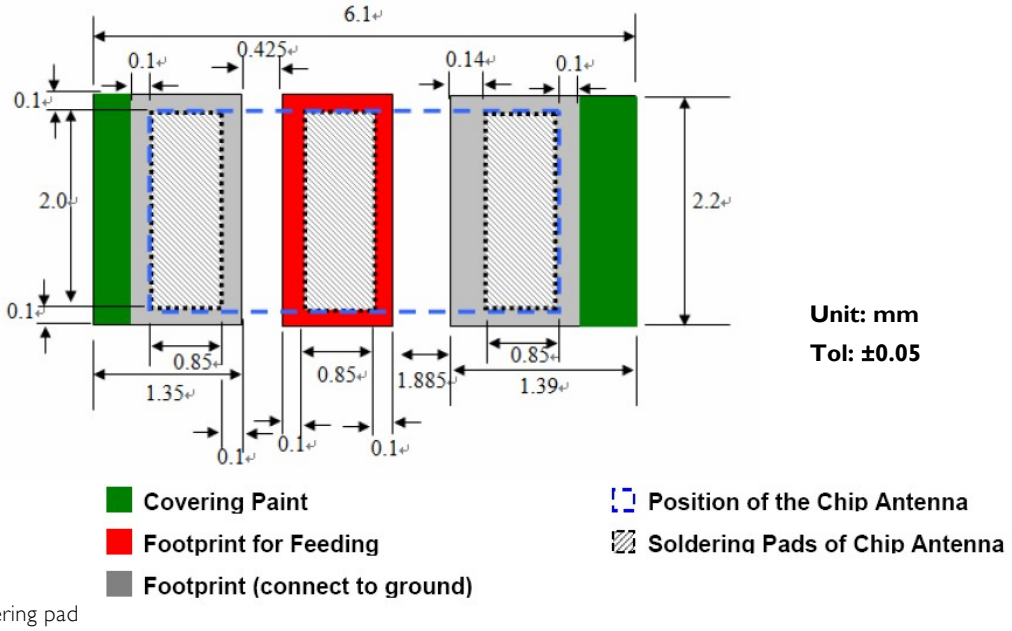


Fig. 4 Details of soldering pad

ELECTRICAL PERFORMANCES

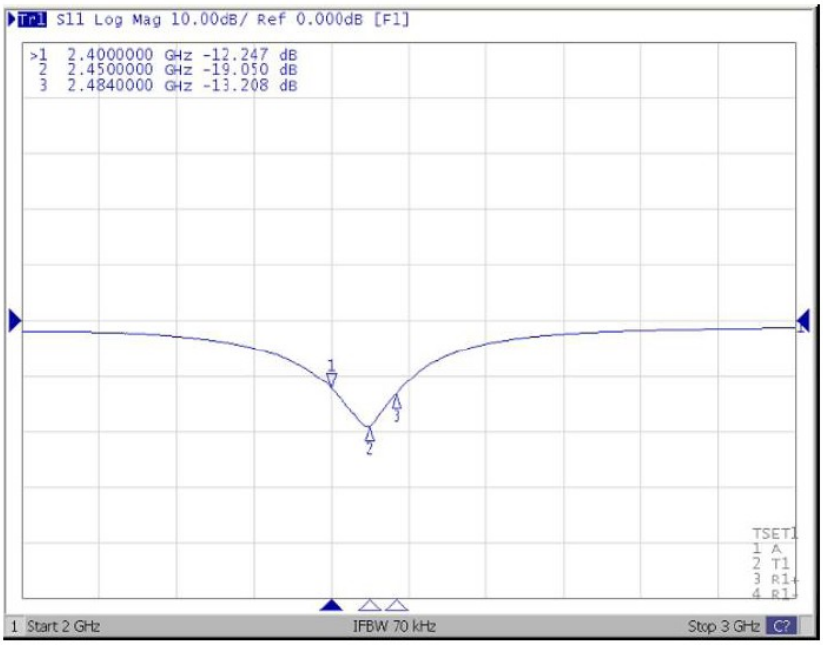
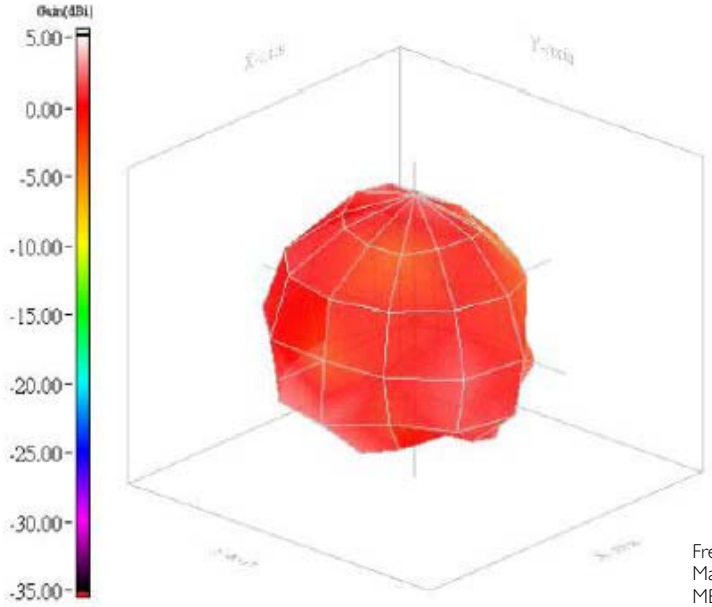


Fig. 5 Return loss



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