

DATA SHEET

WIRELESS COMPONENTS

Ceramic Chip Antenna

ANT5010LL04R2400A

2.4 – 2.5GHz

5010 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 5010 L L04 R 2400A
 (1) (2) (3) (4) (5) (6)

(1) PRODUCT

ANT = Antenna

(2) SIZE

5010 = 5.0 × 1.0 mm

(3) ANTENNA TYPE

L,F,A = Chip Antenna

(4) SERIAL NO.

L04

(5) PACKING TYPE

R = Tape and Reel

(6) WORKING FREQUENCY

2400 = 2.4GHz

PHYCOMP CTC

CAN4311751042453K

I2NC

431175104245

SPECIFICATION

Table 1

DESCRIPTION	VALUE
Working Frequency	2.45 GHz
Bandwidth	210 MHz (Typ.)
Return Loss	6.5 dB min
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	2.28 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)	5.10 ± 0.10
W (mm)	1.00 ± 0.10
T (mm)	1.00 ± 0.10
A (mm)	0.85 ± 0.15

OUTLINES

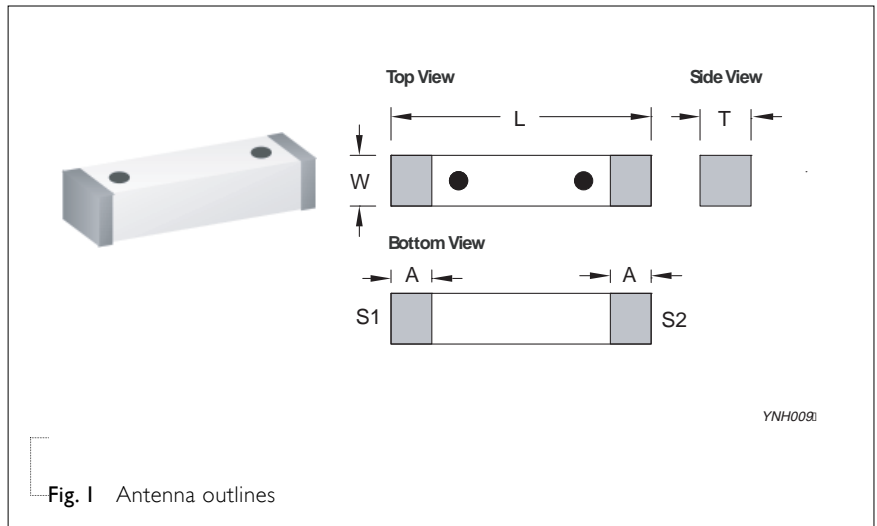


Table 3 Termination configuration

TERMINAL NAME	FUNCTION
S1	Feeding or Soldering Point
S2	Soldering or Feeding Point

REFERENCE DESIGN OF EVALUATION BOARD

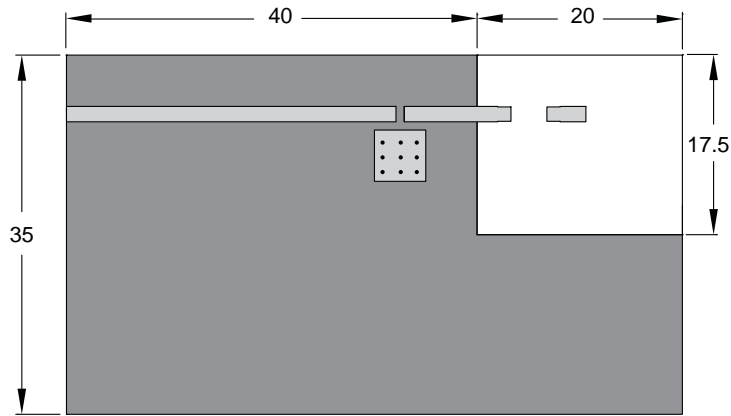


Fig. 2 Outlook and dimension of evaluation board

Unit : mm

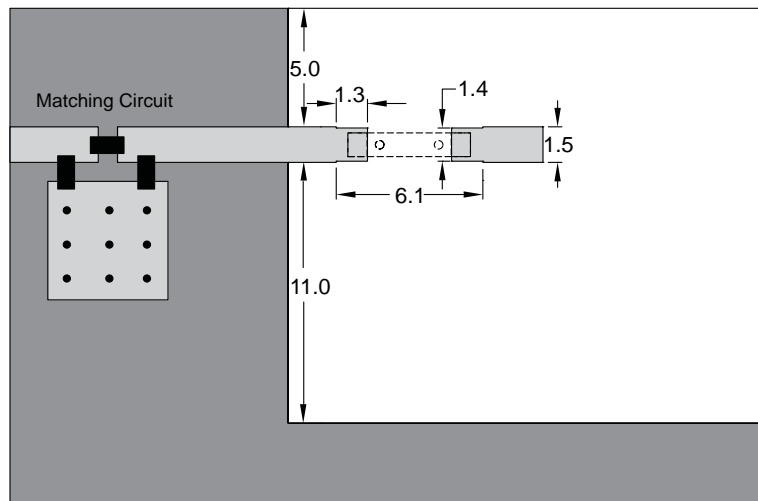
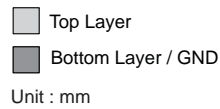


Fig. 3 Details of soldering Pad

YNH009I

ELECTRICAL PERFORMANCES

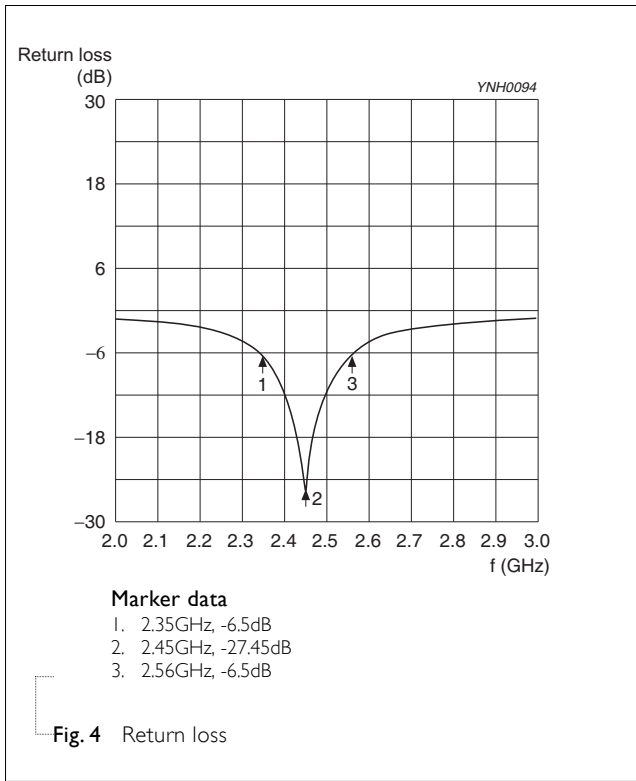


Fig. 4 Return loss

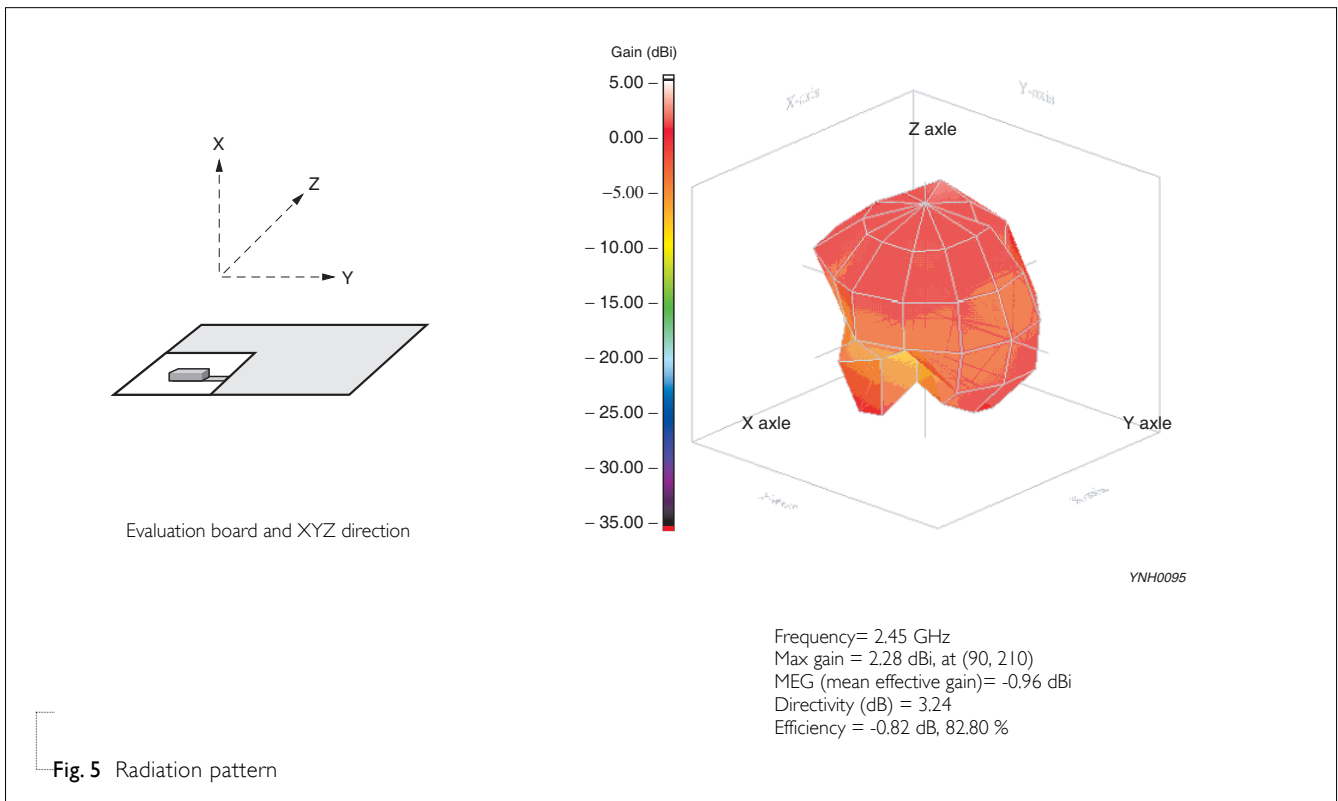


Fig. 5 Radiation pattern

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Apr. 22, 2013	-	- New datasheet for Ceramic Chip Antenna, 2.4 – 2.5 GHz application, 5010 Series