

DATA SHEET

WIRELESS COMPONENTS

Ceramic Chip Antenna

ANT7020LL05R2400A

2.4 - 2.5GHZ

7020 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 devic
- 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 7020 L L05 R 2400A
 (1) (2) (3) (4) (5) (6)

(1) PRODUCT

ANT = Antenna

(2) SIZE

7020 = 7.0 × 2.0 mm

(3) ANTENNA TYPE

L,F,A = Chip Antenna

(4) SERIAL NO.

L05

(5) PACKING STYLE

R = Tape and Reel

(6) WORKING FREQUENCY

2400 = 2.4GHz

PHYCOMP CTC

CAN4311772052452K

I2NC

431177205245

SPECIFICATION

Table 1

DESCRIPTION	VALUE
Centre Frequency	2.45 GHz
Bandwidth	500 MHz (Typ.)
Return Loss	10 dB min
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	2.62 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)	7.00±0.20
W (mm)	2.00±0.20
T (mm)	0.75±0.20
A (mm)	0.45±0.20

OUTLINES

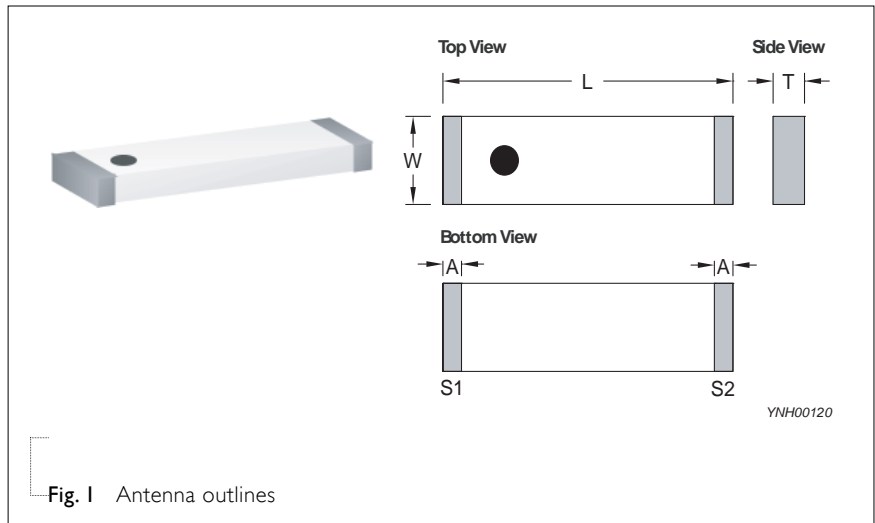


Fig. 1 Antenna outlines

Table 3 Termination configuration

TERMINAL NAME	FUNCTION
S1	Feeding Point
S2	Soldering Point

REFERENCE DESIGN OF EVALUATION BOARD

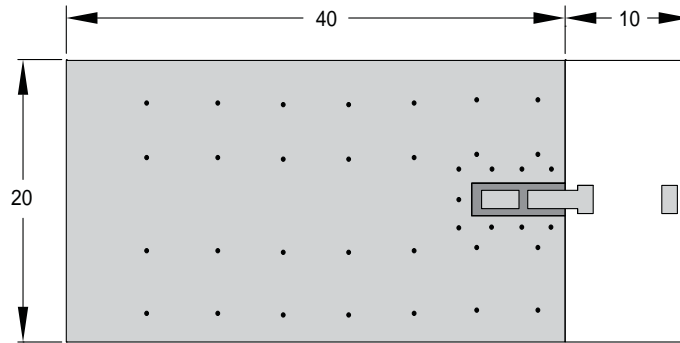


Fig. 2 Outlook and dimension of evaluation board

Unit : mm

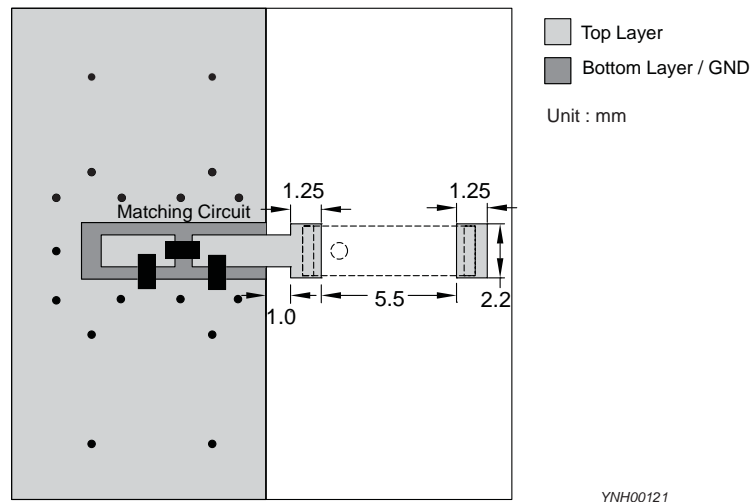


Fig. 3 Details of soldering Pad

YNH00121

ELECTRICAL PERFORMANCES

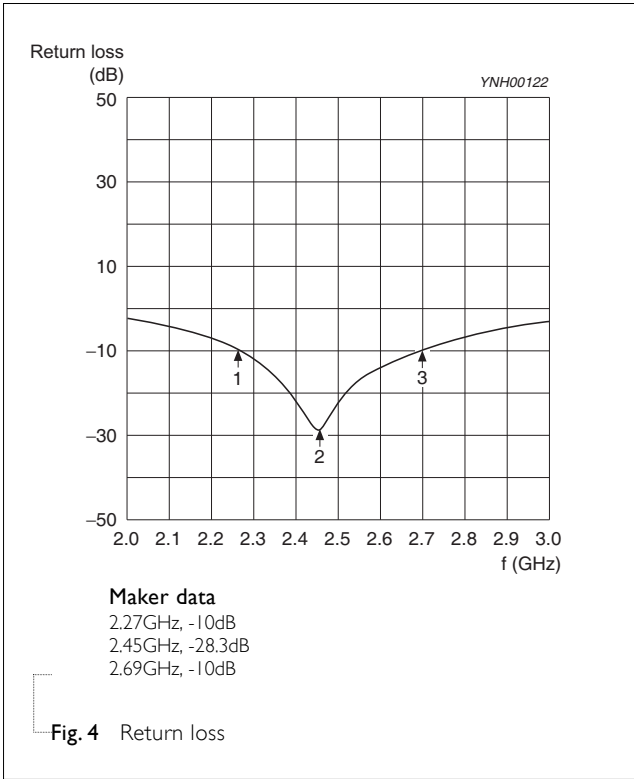


Fig. 4 Return loss

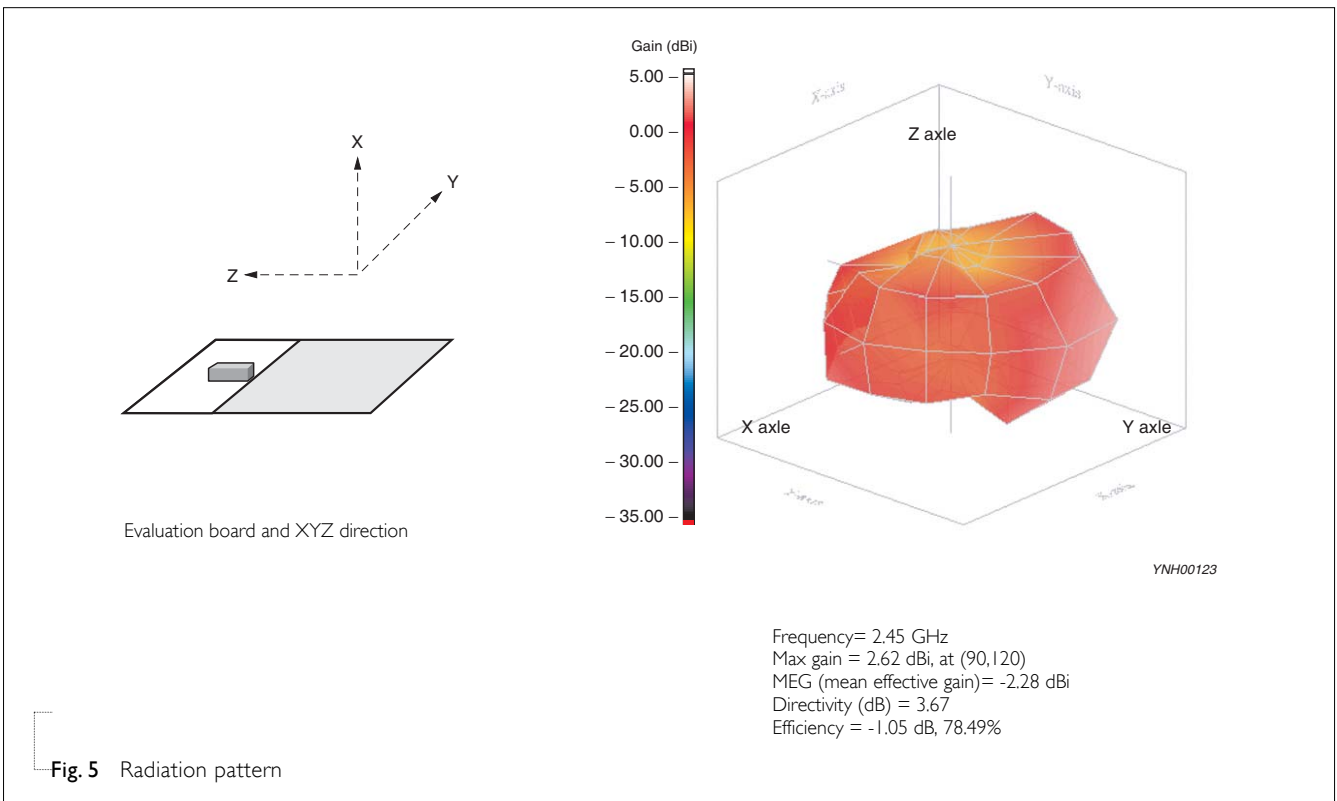


Fig. 5 Radiation pattern

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Feb. 22, 2013	-	- New data sheet for SMD type antenna, 2.45GHz application, 7020 series

Mouser Electronics

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Yageo:

[ANT7020LL05R2400A](#)