Innovative Service Around the Globe YAGEO

DATA SHEET

WIRELESS COMPONENTS

Ceramic Chip Antenna
ANT8868LL00R1880A

DECT

8868 Series

Product Specification — March 27, 2013 V.0

Phycomp

FEATURES

- Compact size
- Omni-directional radiation
- Tape & reel automatic mounting
- Reflow process compatible
- RoHS compliant

APPLICATIONS

- DECT cordless telephone

ORDERING INFORMATION

All part numbers are identified by the series, packing type, material, size, antenna type, working frequency and packing quantity.

PART NUMBER

ANT	8868	L	L00	R	1880A
(1)	(2)	(3)	(4)	(5)	(6)

(1) PRODUCT

ANT = Antenna

(2) SIZE

8868 = 8.8 × 6.8 mm

(3) ANTENNA TYPE

L,F,A = Chip Antenna

(4) SERIAL NO.

L00

(5) PACKING TYPE

R = Tape and Reel

(6) WORKING FREQUENCY

1880 = 1.88 - 2.0GHz

PHYCOMP CTC

CAN431178800188 1K

12NC

431178800188

SPECIFICATION

Table 1

DESCRIPTION	VALUE
Centre Frequency	1.88 ~ 2.0 GHz
Bandwidth	220 MHz(Typ.)
Return Loss	10 dB min
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	6.13 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℃ , 10sec.

NOTE

1. The specification is defined on Yageo evaluation board

DIMENSIONS

Table 2 Machinical Dimension

	DIMENSION
L (mm)	8.80 ± 0.20
W (mm)	6.80 ± 0.20
T (mm)	0.90 ± 0.20
A (mm)	4.30 ± 0.20
B (mm)	1.30 ± 0.20
C (mm)	0.50 ± 0.30
D (mm)	1.00 ± 0.20
E (mm)	7.60 ± 0.20

Table 3 Termination configuration

TERMINAL NAME	FUNCTION
S1	Feeding Point
S2	Soldering Point

OUTLINES

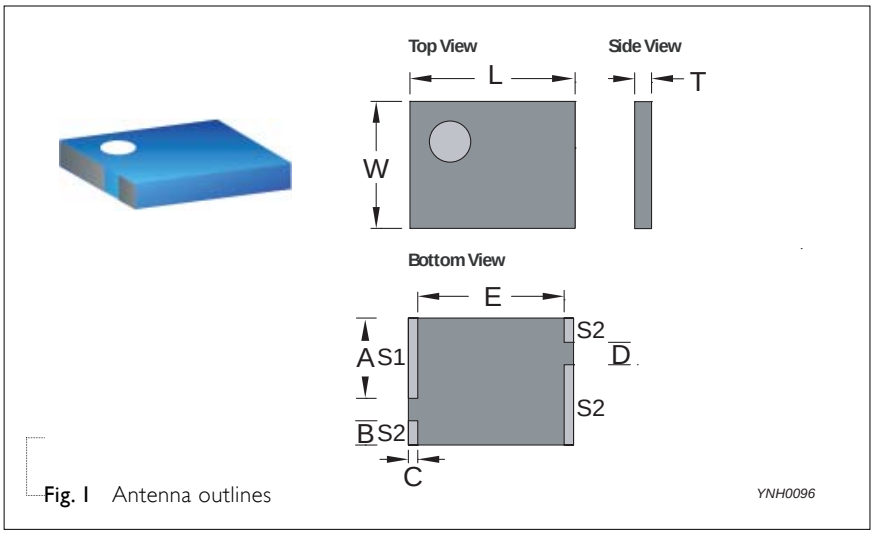
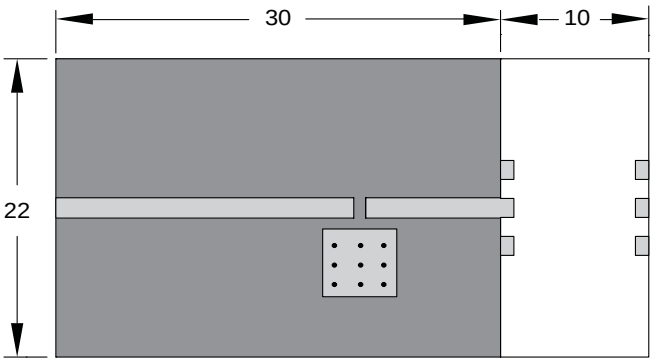


Fig. 1 Antenna outlines

REFERENCE DESIGN OF EVALUATION BOARD



Unit : mm

Fig. 2 Outlook and dimension of evaluation board

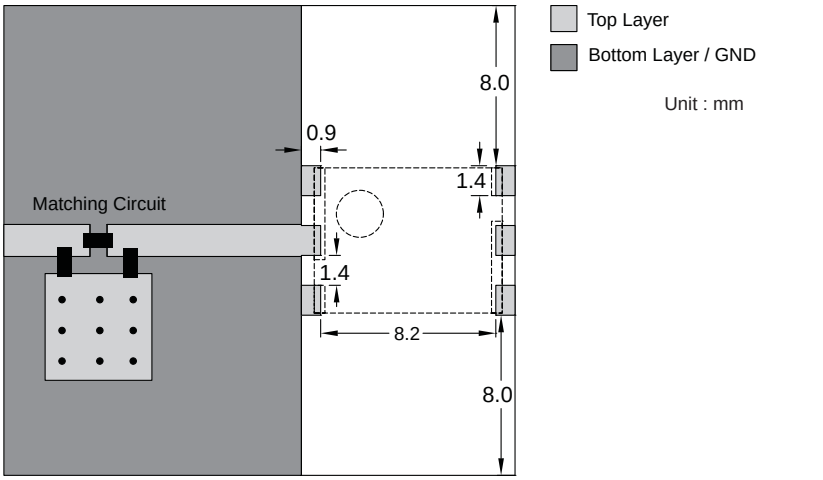
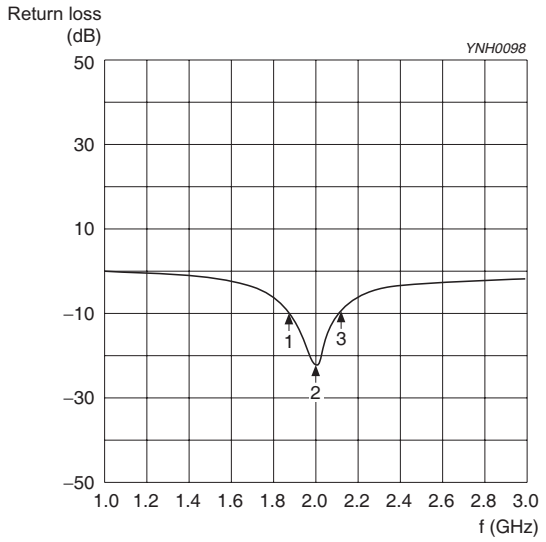


Fig. 3 Details of soldering Pad

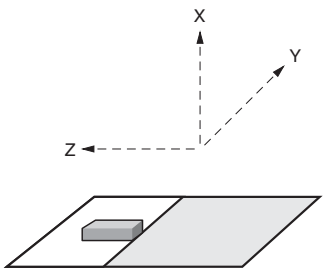
ELECTRICAL PERFORMANCES



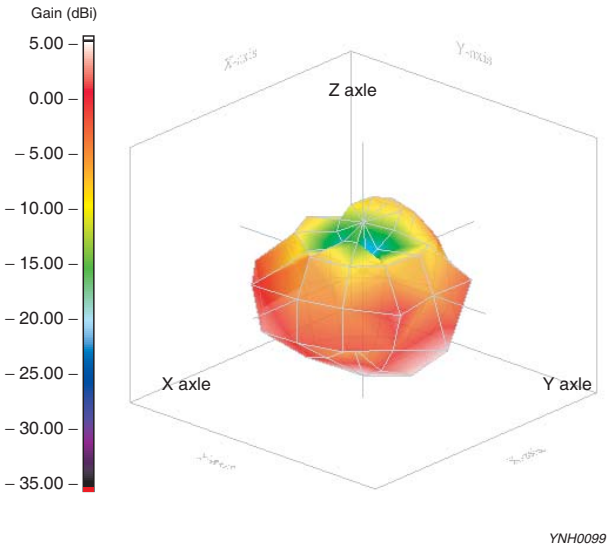
Marker data

1. 1.88GHz, -10dB
2. 2.00GHz, -22.4dB
3. 2.1GHz, -10dB

Fig. 4 Return loss



Evaluation board and XYZ direction



Frequency = 1990 MHz
Max gain = 6.13 dBi, at (150,240)
MEG (mean effective gain)= 0.28 dBi
Directivity (dB) = 7.39
Efficiency = -1.26dB, 74.80 %

Fig. 5 Radiation pattern

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Mar. 27, 2013	-	- New datasheet for Ceramic Chip Antenna, DECT application, 8868 series