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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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DATA SHEET

WIRELESS COMPONENTS
Ceramic Chip Antenna
ANT7020LL05R0870A

870 MHz
7020 Series



FEATURES

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

APPLICATIONS

- Smart meter
- Industrial remote control
- 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 0870A
 (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 TYPE

R = Tape and Reel

(6) WORKING FREQUENCY

0870 = 0.87GHz

PHYCOMP CTC

CAN4311772050872K

I2NC

431177205087

SPECIFICATION

Table 1

DESCRIPTION	VALUE
Centre Frequency	870M Hz
Bandwidth	37MHz (Typ.)
Return Loss	10 dB min
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	1.83 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)	2.05 ±0.20
T (mm)	0.78 ±0.20
A (mm)	0.45 ±0.20

OUTLINES

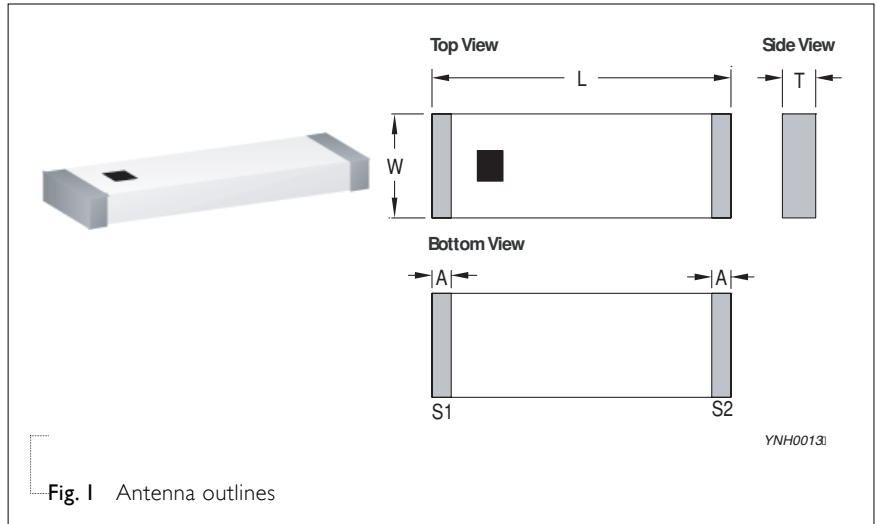
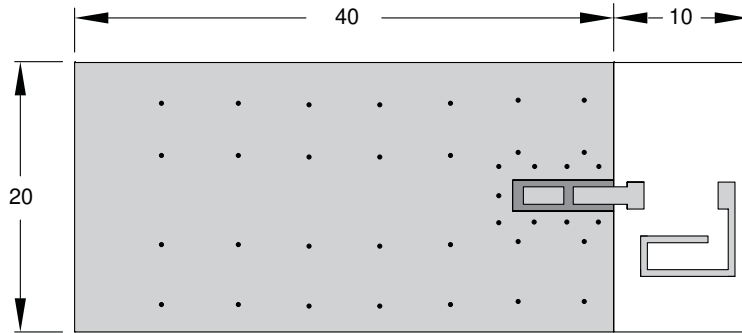


Fig. I Antenna outlines

Table 3 Termination configuration

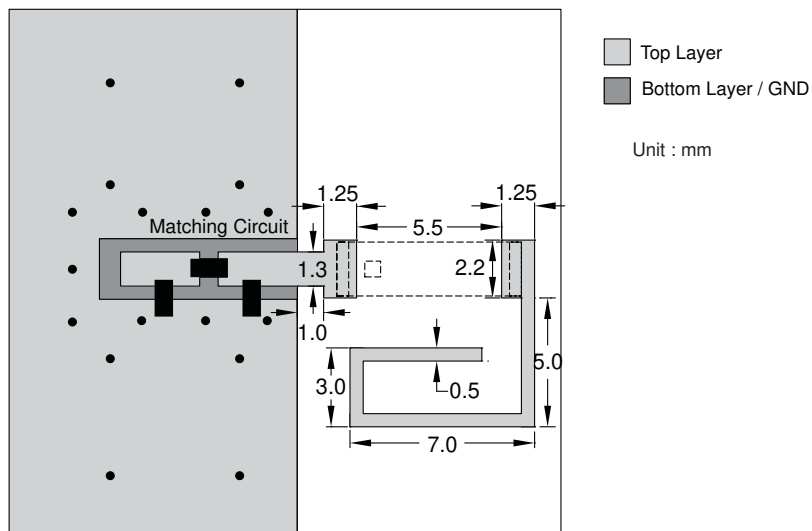
TERMINAL NAME	FUNCTION
S1	Feeding Point
S2	Soldering Point

REFERENCE DESIGN OF EVALUATION BOARD



Unit : mm

Fig. 2 Outlook and dimension of evaluation board



Unit : mm

Fig. 3 Details of soldering Pad

YNH00133

ELECTRICAL PERFORMANCES

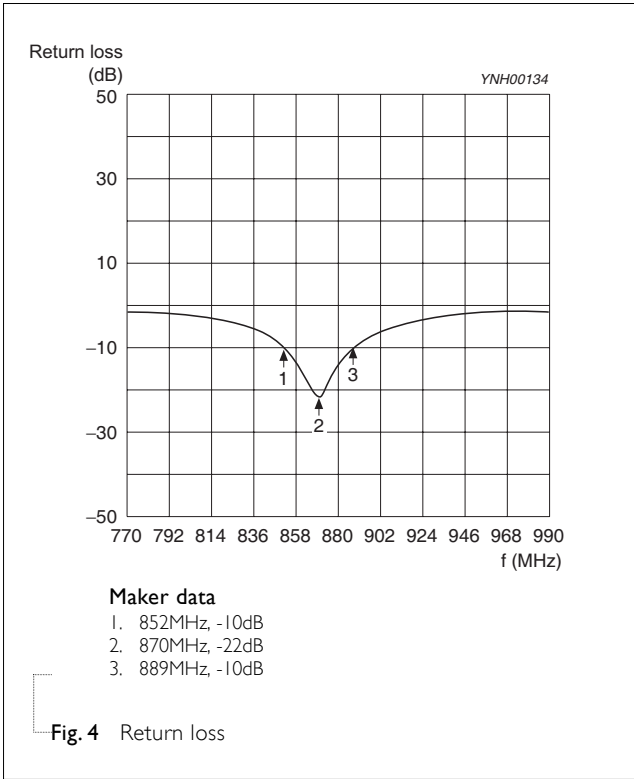


Fig. 4 Return loss

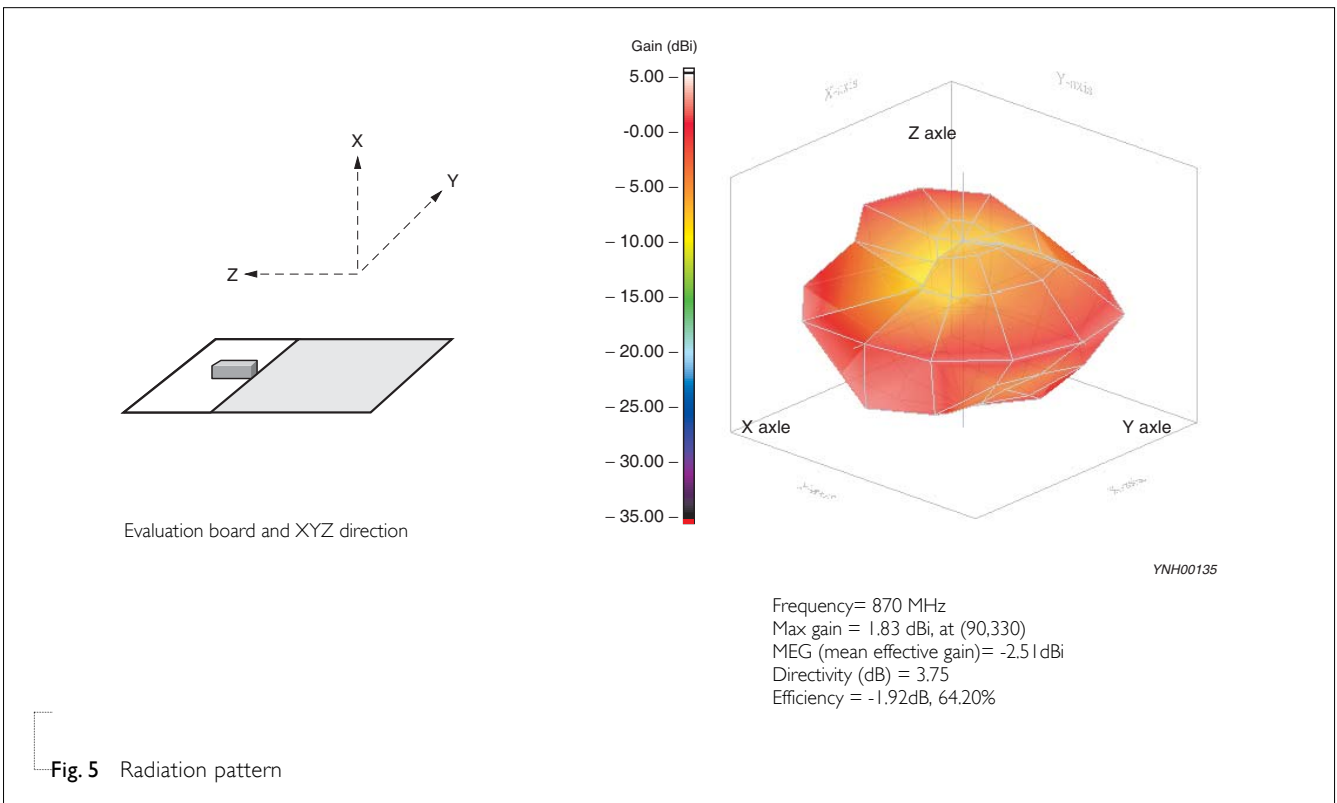


Fig. 5 Radiation pattern

REVISION HISTORY**REVISION DATE CHANGE NOTIFICATION DESCRIPTION**

Version 0	Mar. 27, 2013	-	- New datasheet for Ceramic Chip Antenna, 870MHz application, 7020 series
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