

# 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)

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**(1) PRODUCT**

ANT = Antenna

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**(2) SIZE**

7020 = 7.0 × 2.0 mm

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**(3) ANTENNA TYPE**

L,F,A = Chip Antenna

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**(4) SERIAL NO.**

L05

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**(5) PACKING TYPE**

R = Tape and Reel

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**(6) WORKING FREQUENCY**

0870 = 0.87GHz

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**PHYCOMP CTC**

CAN4311772050872K

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**I2NC**

431177205087

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**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**

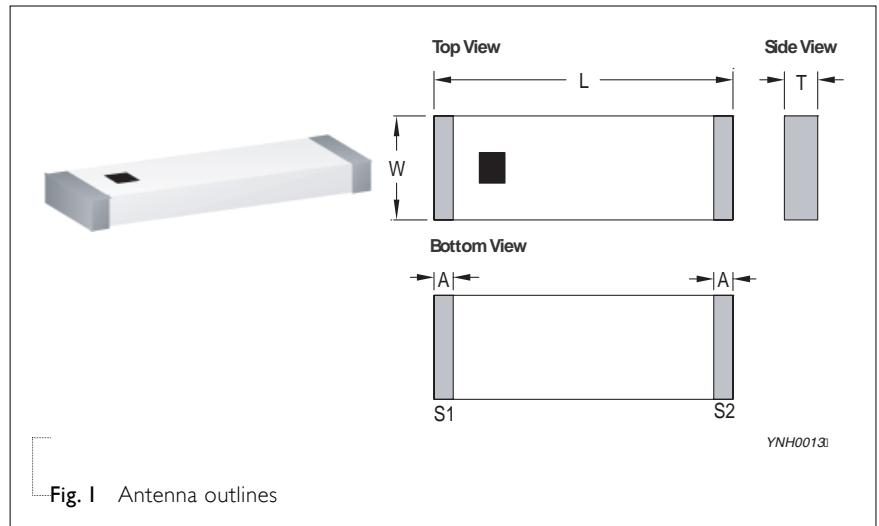
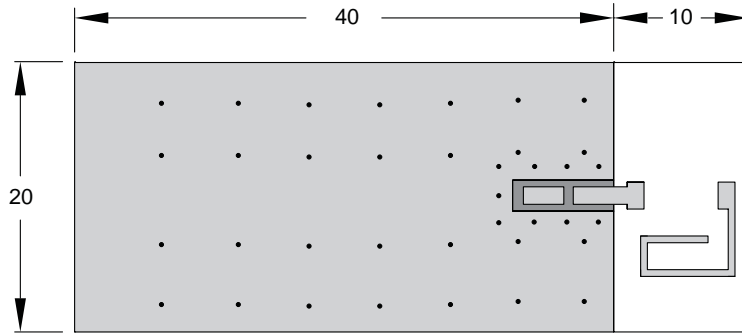


Fig. I Antenna outlines

Table 3 Termination configuration

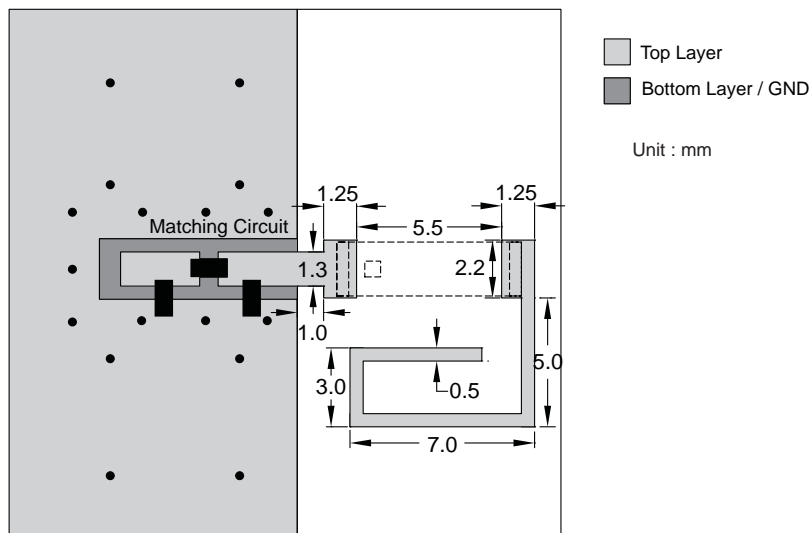
TERMINAL NAME	FUNCTION
S1	Feeding Point
S2	Soldering Point

**REFERENCE DESIGN OF EVALUATION BOARD**



Unit : mm

**Fig. 2** Outlook and dimension of evaluation board



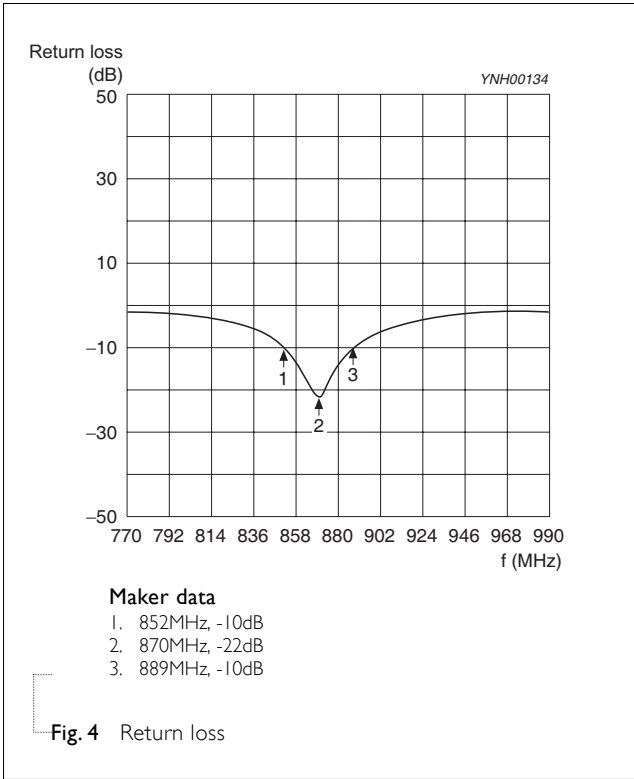
Top Layer  
Bottom Layer / GND

Unit : mm

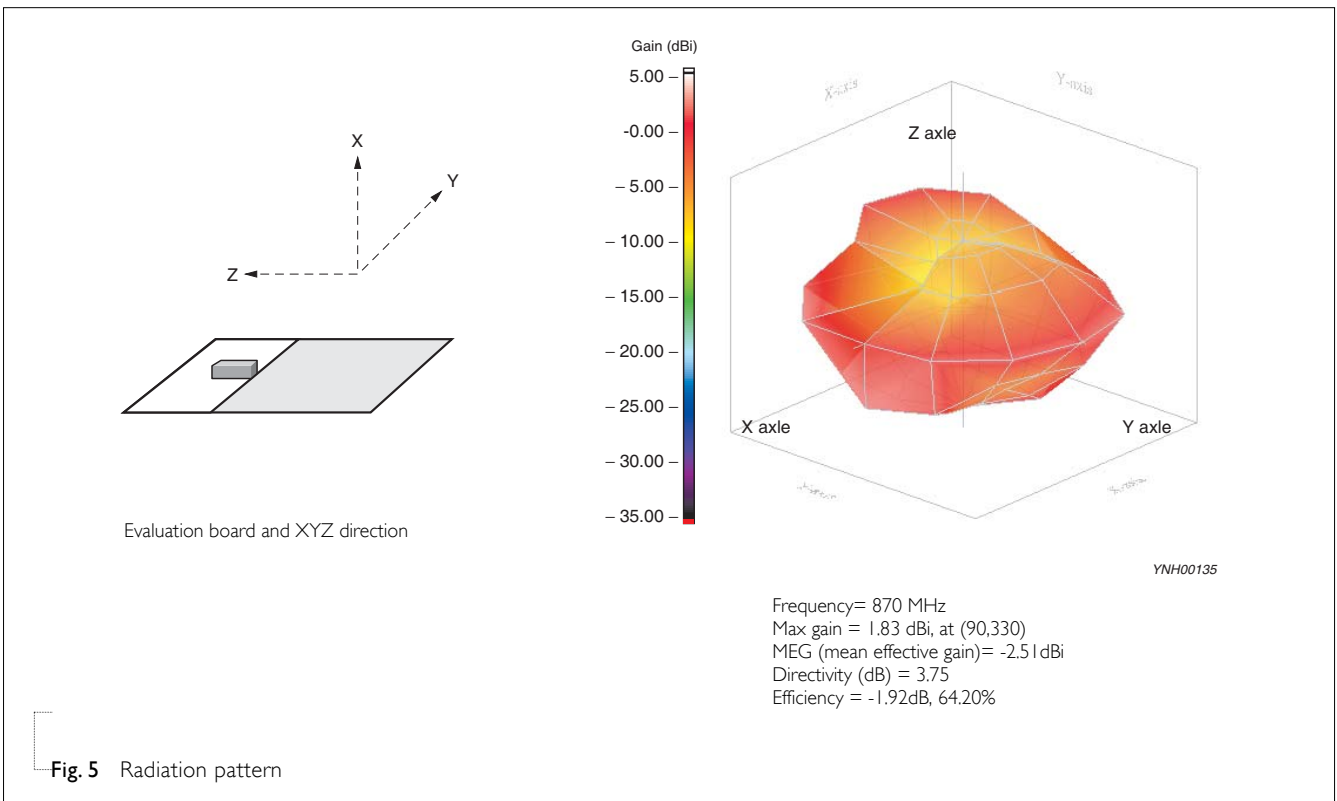
**Fig. 3** Details of soldering Pad

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

单击下面可查看定价，库存，交付和生命周期等信息

[>>Pulse\(普思\)](#)