

DATA SHEET

WIRELESS COMPONENTS

Ceramic Chip Antenna

ANT8010LL05R1516A

GPS/GALILEO & GLONASS

8010 Series



FEATURES

- Support GPS/Galileo & GLONASS system
- High radiation efficiency
- Reflow process compatible (SMD only)
- RoHS compliant

APPLICATIONS

- Tablet (for chip)
- Navigation device
- Telematics box
- Fleet management

ORDERING INFORMATION

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

PART NUMBER

ANT 8010 L L05 R 1516A
 (1) (2) (3) (4) (5) (6)

(1) PRODUCT

ANT = Antenna

(2) SIZE

8010 = 8.0 x 1.0 mm

(3) ANTENNA TYPE

L,F,A = Chip Antenna

(4) SERIAL NO.

L05

(5) PACKING STYLE

R = Tape and Reel

(6) WORKING FREQUENCY

1516 = 1.575/1.602 GHz

PHYCOMP CTC

CAN4311781051563K

I2NC

431178105156

SPECIFICATION

Table 1

DESCRIPTION	VALUE
Centre Frequency	1.575G/1.602GHz
Bandwidth	80 MHz (Typ.)
Return Loss	10 dB min
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	GPS/Galileo: 1.53 dBi (Typ.) Glonass: 1.69 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)	8.0 ±0.20
W (mm)	1.0 ±0.20
T (mm)	1.0 ±0.20
C (mm)	0.9 ± 0.15

Table 3 Termination configuration

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

OUTLINES

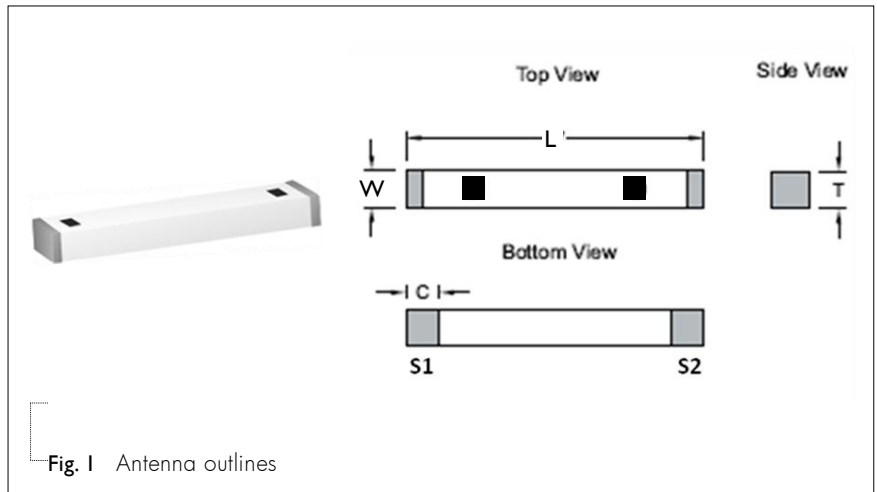
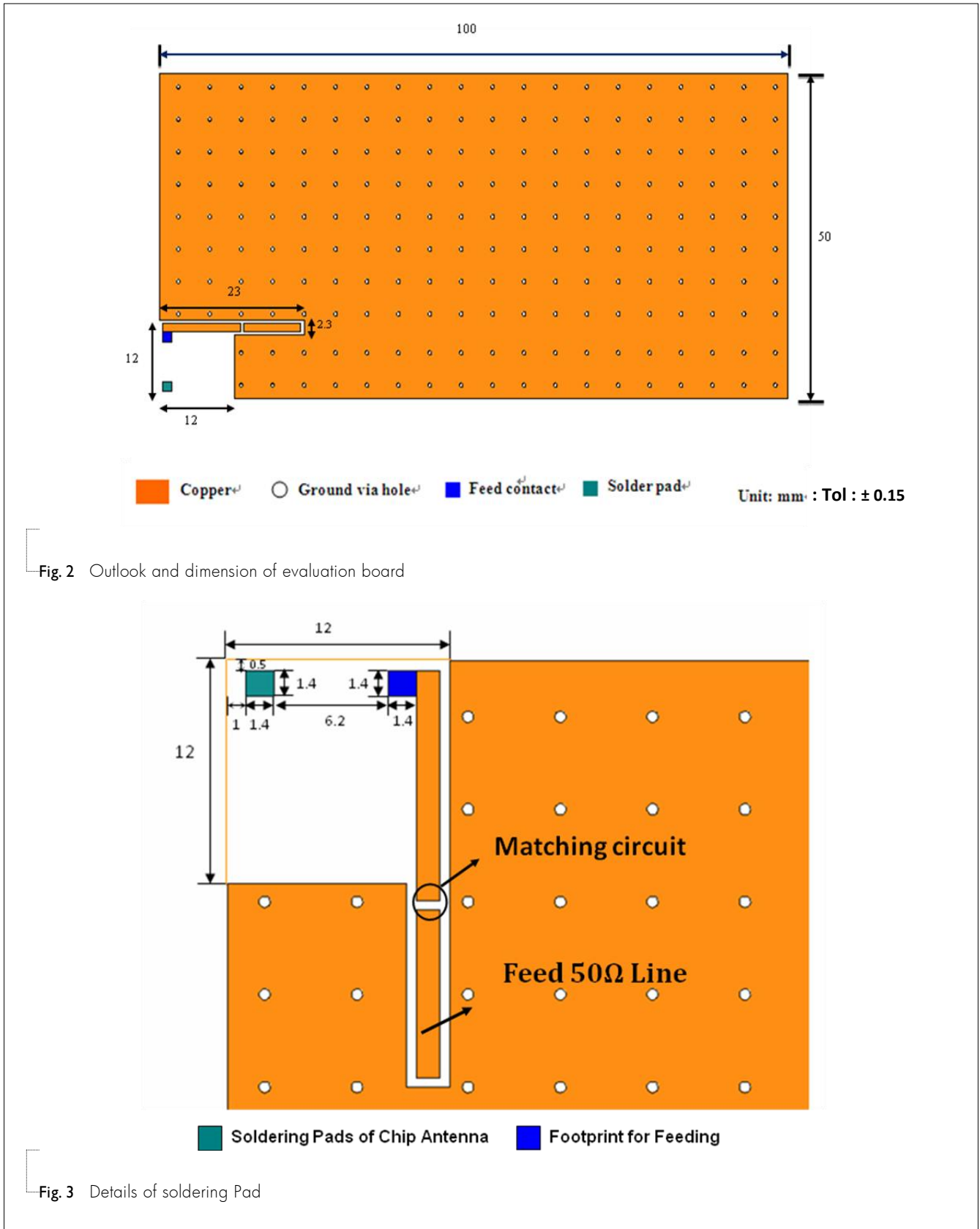


Fig. 1 Antenna outlines

REFERENCE DESIGN OF EVALUATION BOARD



ELECTRICAL PERFORMANCES

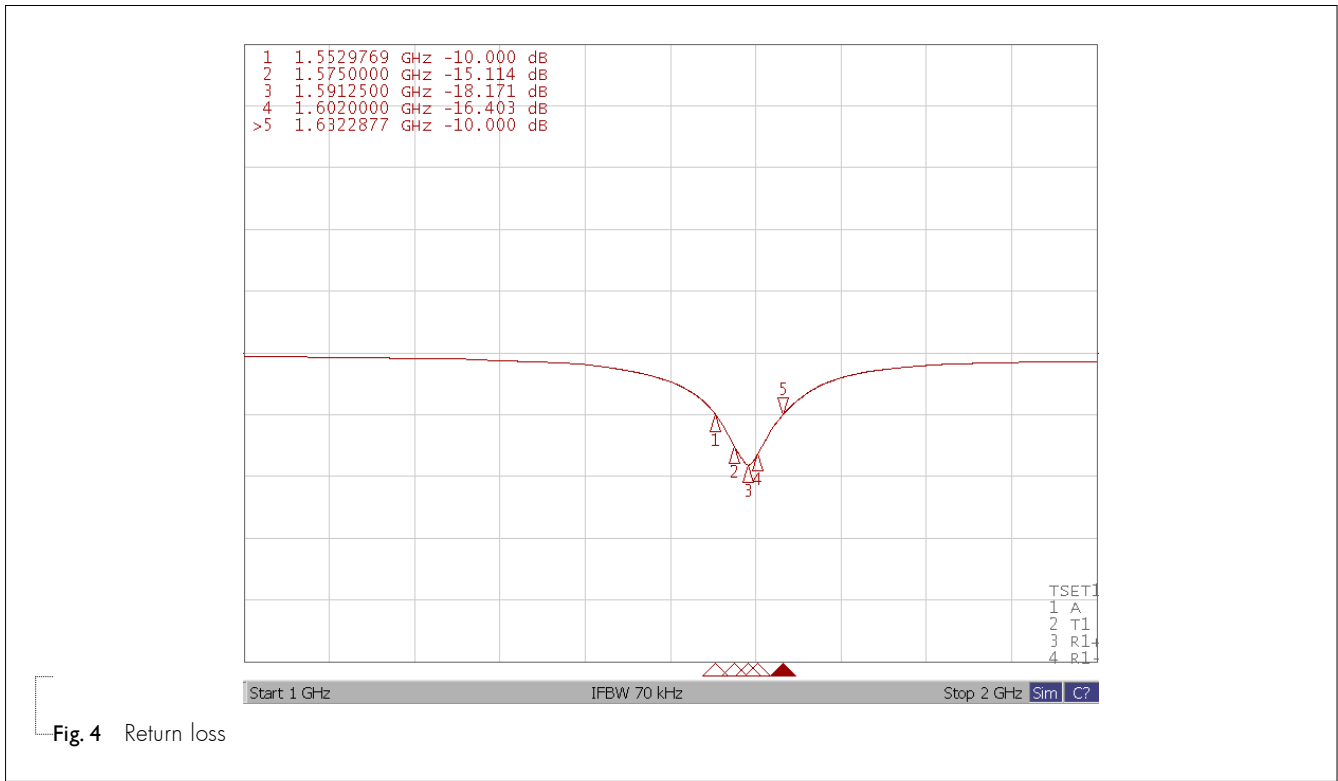


Fig. 4 Return loss

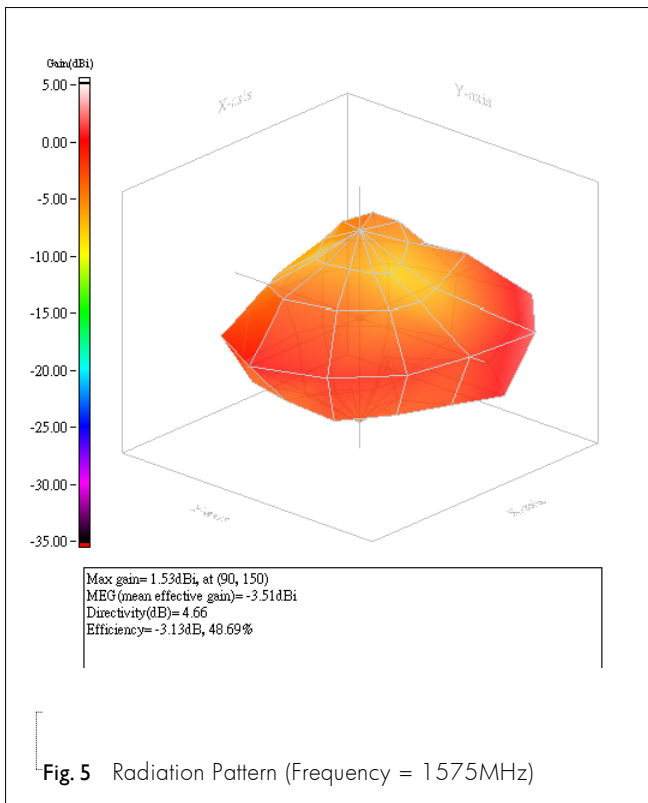


Fig. 5 Radiation Pattern (Frequency = 1575MHz)

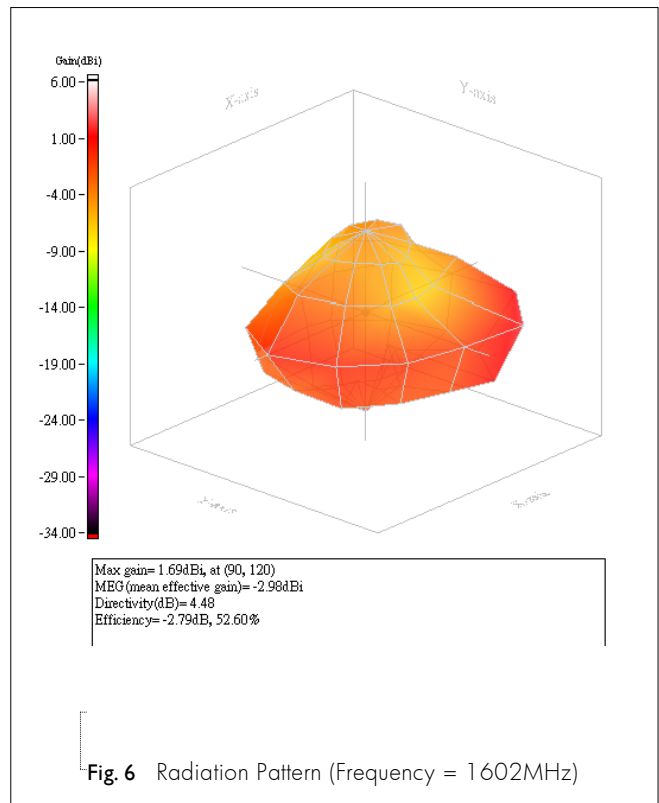


Fig. 6 Radiation Pattern (Frequency = 1602MHz)

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Apr. 25, 2014 -		- New data sheet for Ceramic Chip Antenna, 1.575 GHz & 1.602 GHz, size 8.0 x 1.0 mm
Version 1	Mar.12, 2018 -		- Correct L&W spec