



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# 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**

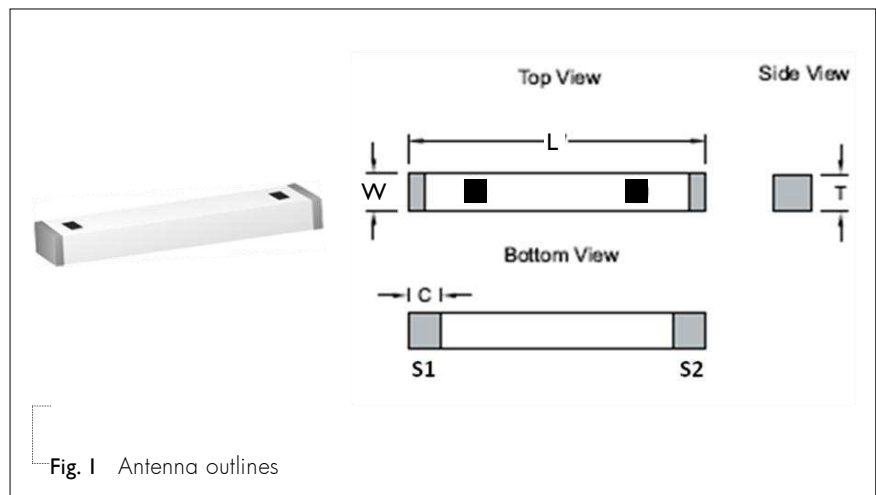
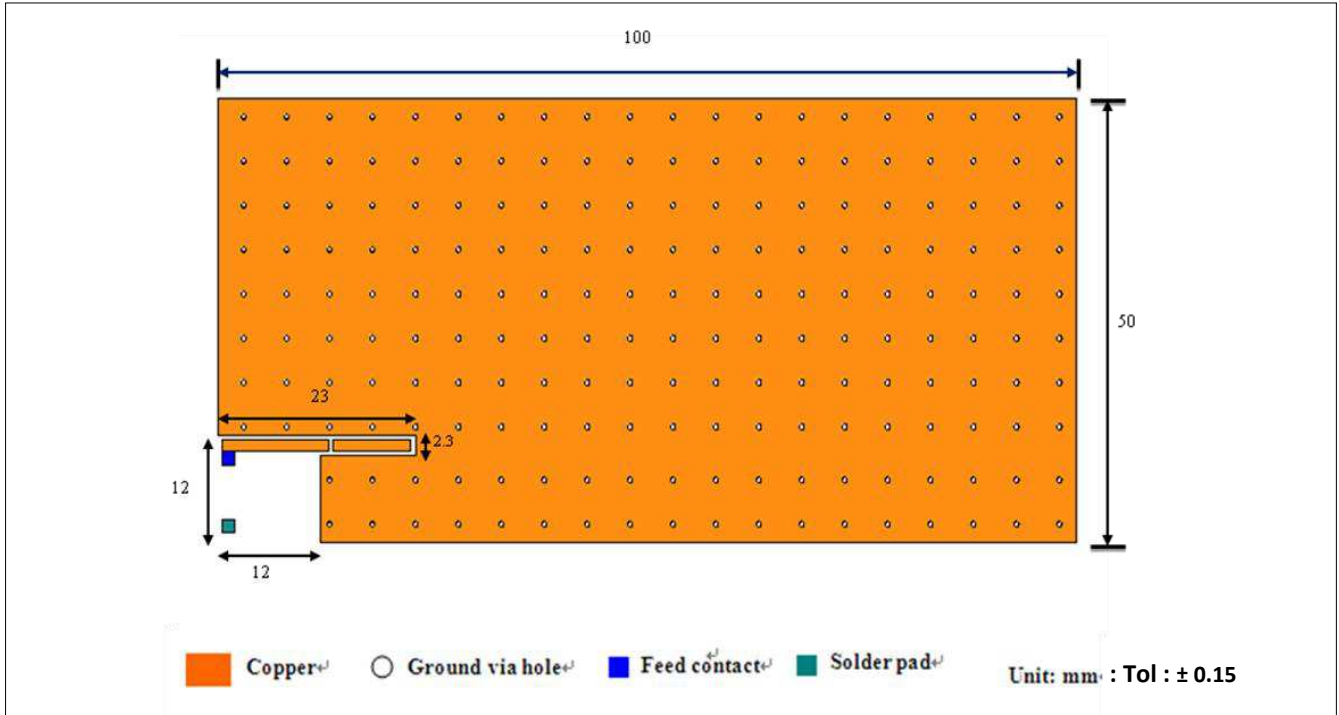
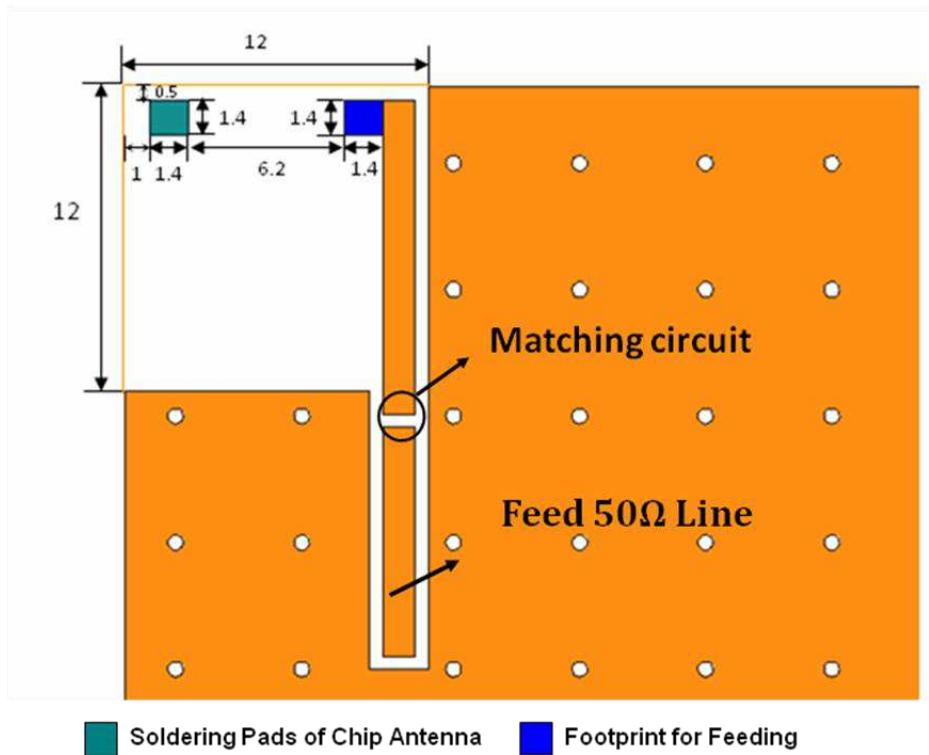


Fig. 1 Antenna outlines

**REFERENCE DESIGN OF EVALUATION BOARD**

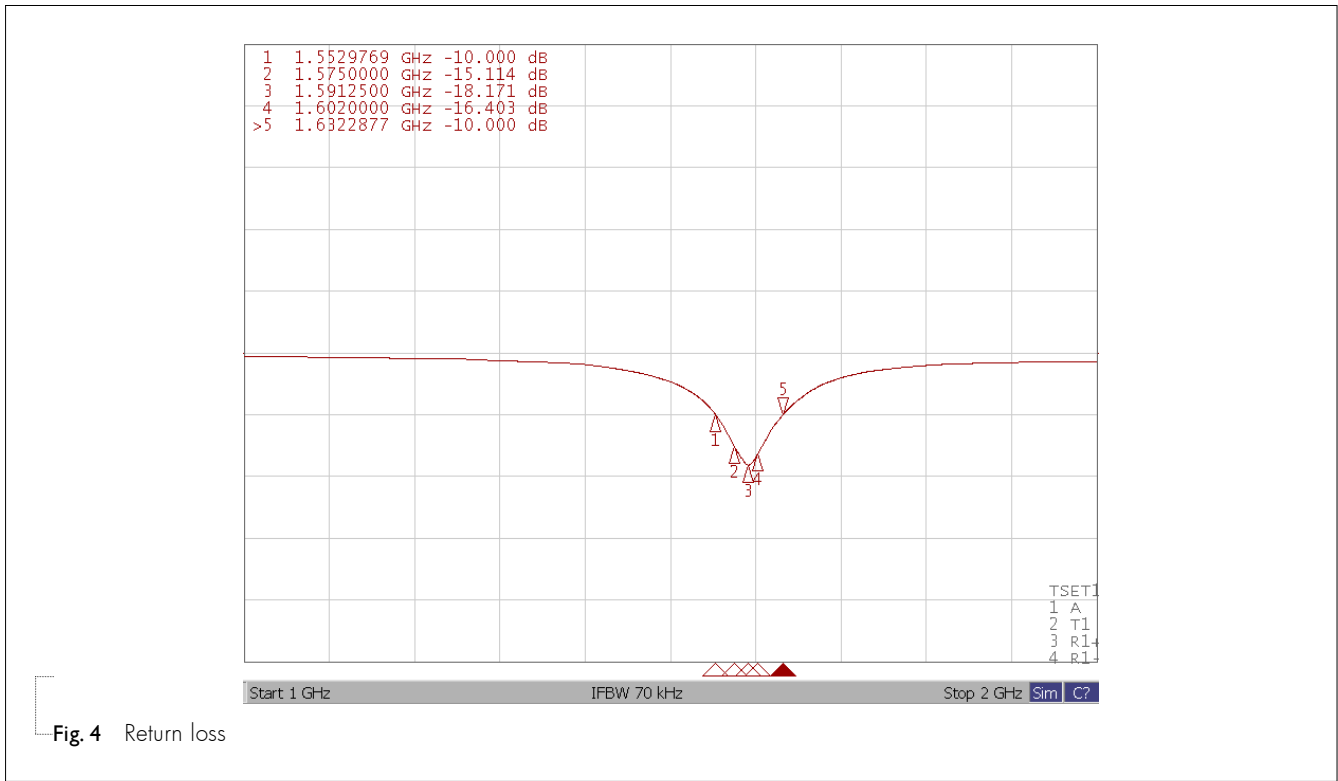


**Fig. 2** Outlook and dimension of evaluation board

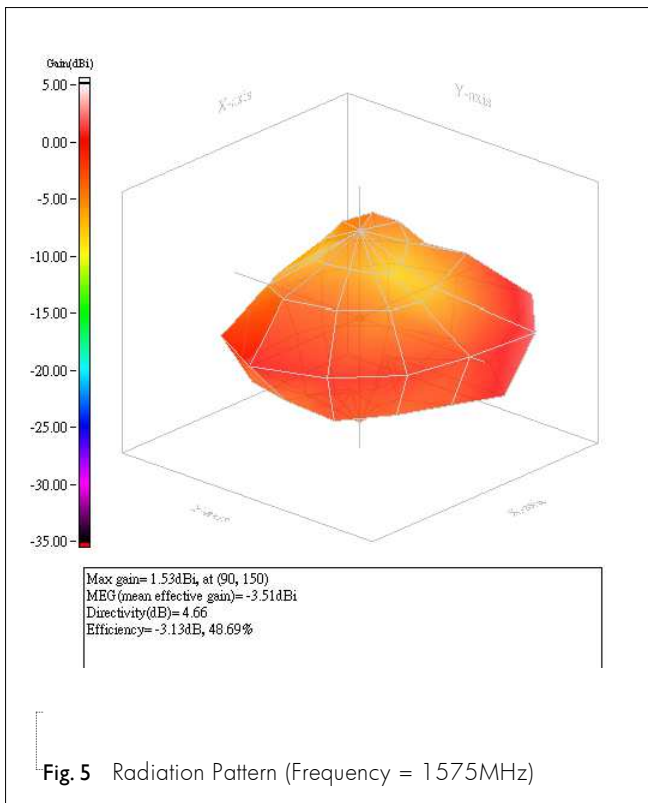


**Fig. 3** Details of soldering Pad

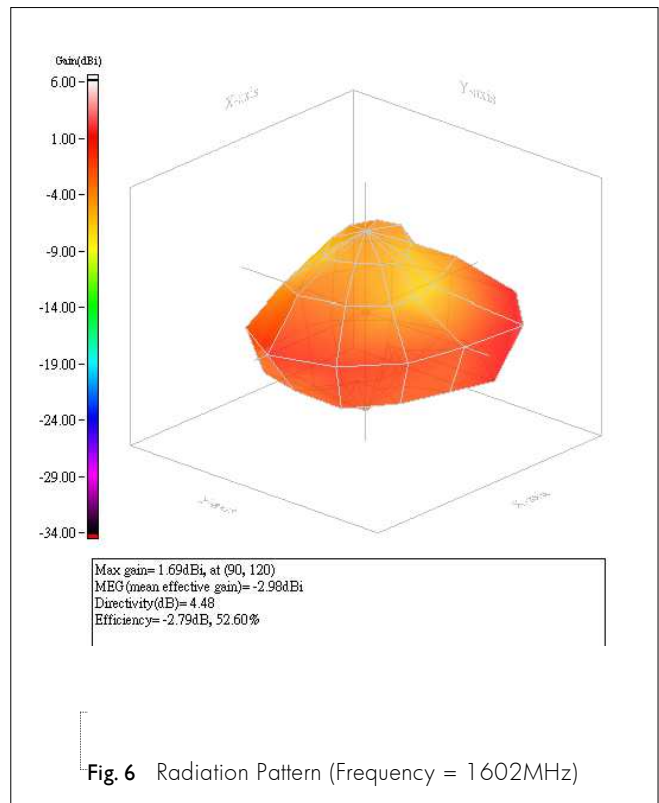
**ELECTRICAL PERFORMANCES**



**Fig. 4** Return loss



**Fig. 5** Radiation Pattern (Frequency = 1575MHz)



**Fig. 6** Radiation Pattern (Frequency = 1602MHz)

**REVISION HISTORY**

<b>REVISION</b>	<b>DATE</b>	<b>CHANGE NOTIFICATION</b>	<b>DESCRIPTION</b>
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