

DATA SHEET

WIRELESS COMPONENTS

Active Antenna

ANT8010JLC1B1516A

GPS & GLONASS

22x6x1.9 MM



FEATURES

- Compact size
- Support GPS & GLONASS system
- High radiation efficiency
- Integrated LNA
- Flexible cable/connector option
- RoHS compliant

APPLICATIONS

- Tablet
- Navigation device
- Telematics box
- Tracker

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 J LCI B 1516A
 (1) (2) (3) (4) (5) (6)

(1) PRODUCT

ANT = Antenna products

(2) SIZE

8010 = 8.1 × 1.0 mm

(3) ANTENNA TYPE

J = Integrated Antenna

(4) SERIAL NO.

LCI

(5) PACKING STYLE

B = Plastic Bag

(6) WORKING FREQUENCY

1516 = 1.575 / 1.602 GHz

PHYCOMP CTC

CAN431398LCI1561B

I2NC

431398LCI156

ELECTRICAL CHARACTERISTICS

Table 1

CERAMIC CHIP ANTENNA

| DESCRIPTION | VALUE |
|------------------|--|
| Dimension | 8.0×1.0×1.0 mm ³ |
| Centre Frequency | 1575 ~ 1602 MHz |
| Bandwidth | 75 MHz (Typ.) |
| Gain | GPS 1575 MHz : 3.62 dBi (Typ.) GLONASS 1602 MHz : 3.71 dBi (Typ.) |
| VSWR | 2.0 Max. |
| Polarization | Linear Polarization |
| Efficiency | GPS 1575 MHz : 57.72% GLONASS 1602 MHz : 57.59% |

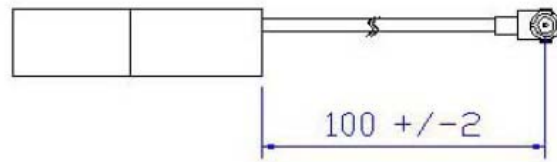
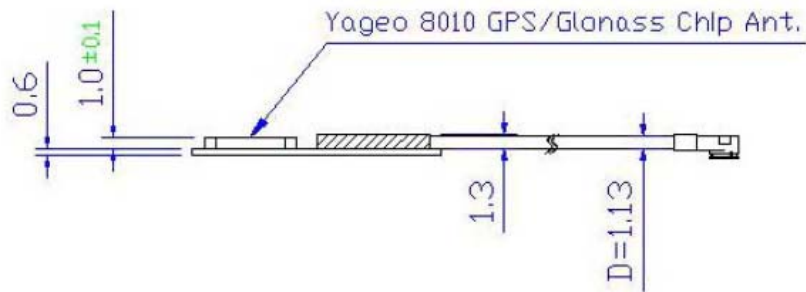
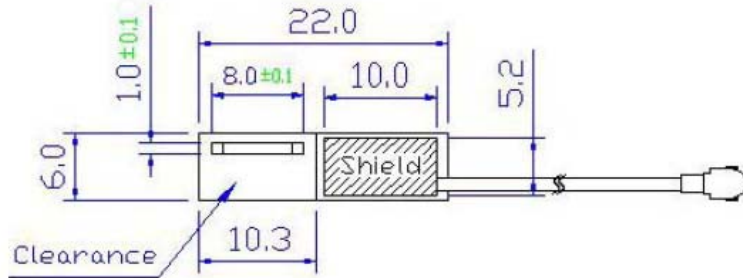
LNA

| DESCRIPTION | VALUE |
|---------------------------|---|
| Centre Frequency | 1575 MHz & 1602 MHz |
| Gain | 1575 MHz : 20.7 ± 1 dB 1602 MHz : 20.7 ± 1 dB |
| Output VSWR | 2.0 Max. |
| Noise Figure | 1575 MHz : 1.86 dB (Typ.) 1602 MHz : 1.97 dB (Typ.) |
| SAW Filter | 40dB min 1.0 ~ 960MHz 20dB min 1427~1463MHz 20dB min 1710~1785MHz 25dB min 1850~1980MHz 40dB min 2401~2483MHz |
| (Out of Band Attenuation) | |
| Supply Voltage | 3.0 ± 0.3V |
| Current Consumption | 3.6 mA (Typ.) |
| Output Impedance | 50Ω |
| Operating Temperature | -30 ~ +85 °C |
| Humidity | < 95% |
| Storage Temperature | -40 ~ +125 °C |

NOTE

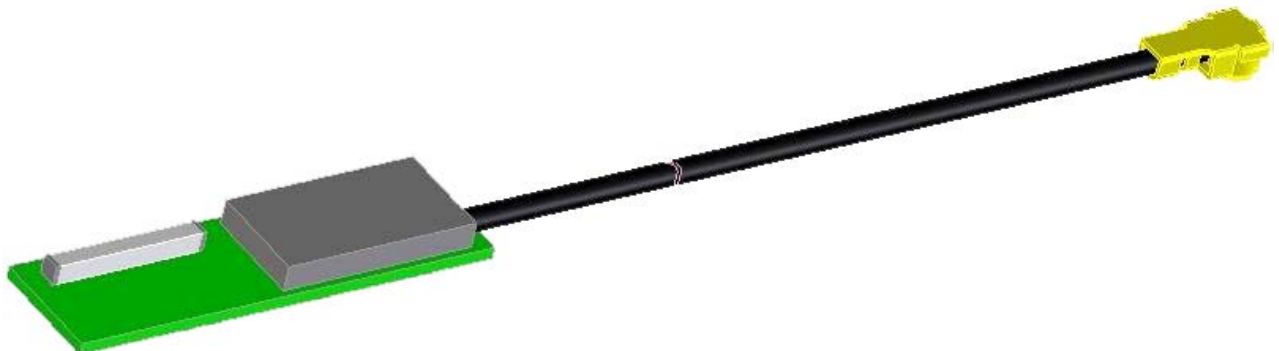
1. Based on 22*6 mm² ground plane (with customer's housing)
2. Centre frequency will be offset to working frequency while changes of customer's housing and ground plane.
3. Please contact local sales if you need customized design to gain optimum antenna performance.

MECHANICAL DATA



Unit : mm

| | |
|----------------|--|
| Length | 22.0 +/- 0.2 mm |
| Width | 6.0 +/- 0.2 mm |
| Thickness | 1.9 ~ 2.1 mm |
| Cable | Diameter= 1.13 mm ; Length= 100 mm ; Black |
| Connector | I-PEX 20428 |
| Shielding Case | 10 × 5.2 × 1.3 mm ³ |



MECHANICAL DATA

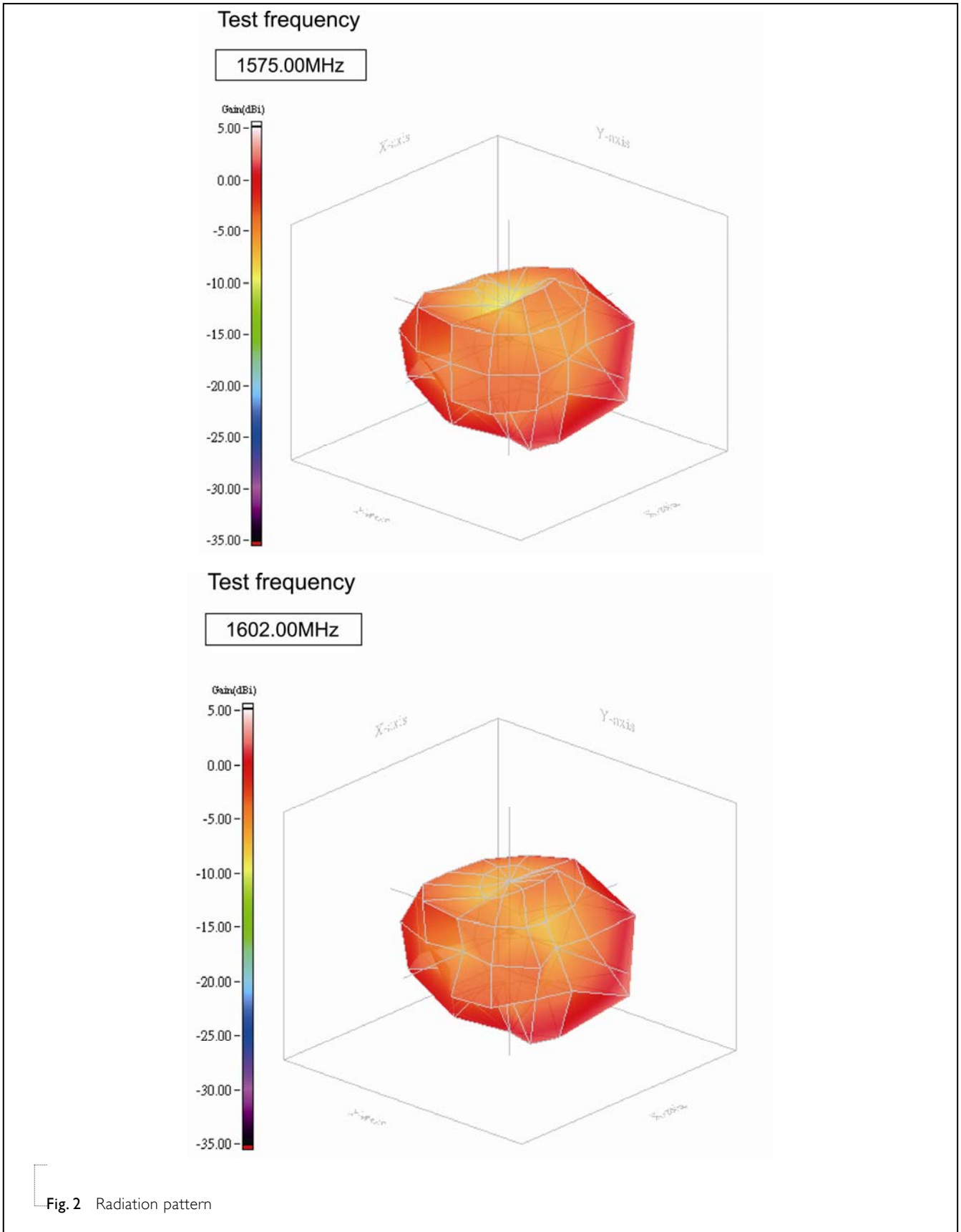


Fig. 2 Radiation pattern

REVISION HISTORYREVISION DATE CHANGE NOTIFICATION DESCRIPTION

| | | | |
|-----------|--------------|---|--|
| Version 0 | May 02, 2013 | - | - New data sheet for Active antenna, SMD Feed size 22×6×1.9 mm |
|-----------|--------------|---|--|