

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 I516A
(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

I516 = 1.575 / 1.602 GHz

PHYCOMP CTC

CAN431398LCI I561B

I2NC

431398LCI I56

ELECTRICAL CHARACTERISTICS

Table 1

CERAMIC CHIP ANTENNA

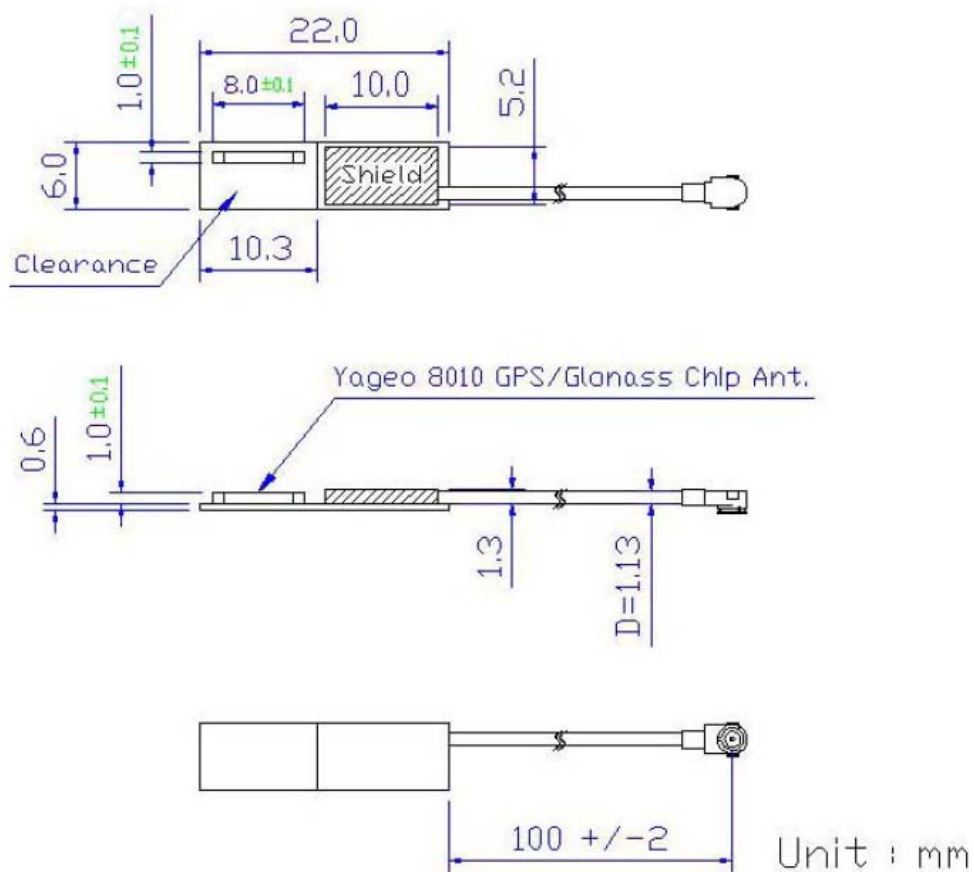
DESCRIPTION	VALUE
Dimension	8.0×1.0×1.0 mm ³
Centre Frequency	1575 ~ 1602 MHz
Bandwidth	75 MHz (Typ.)
Gain	GPS 1575 MHz : 3.62 dBi (Typ.) GLONASS 1602 MHz : 3.71 dBi (Typ.)
VSWR	2.0 Max.
Polarization	Linear Polarization
Efficiency	GPS 1575 MHz : 57.72% GLONASS 1602 MHz : 57.59%

LNA

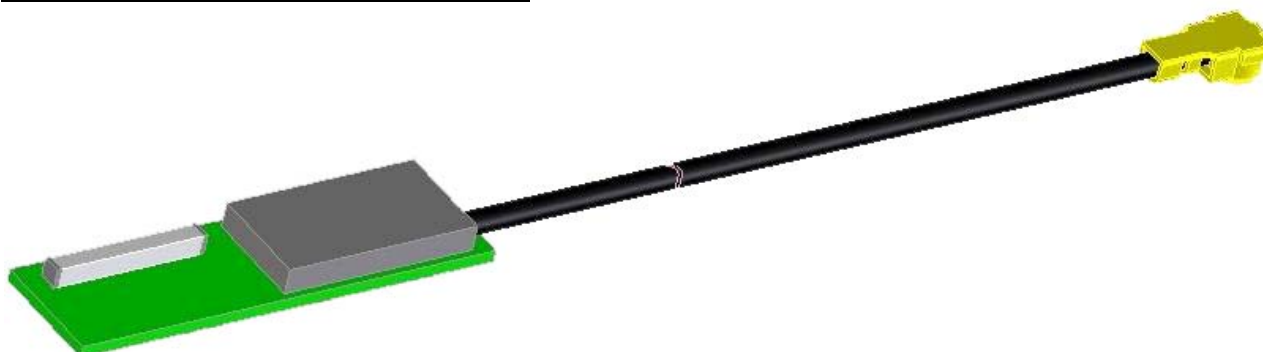
DESCRIPTION	VALUE
Centre Frequency	1575 MHz & 1602 MHz
Gain	1575 MHz : 20.7 ± 1 dB 1602 MHz : 20.7 ± 1 dB
Output VSWR	2.0 Max.
Noise Figure	1575 MHz : 1.86 dB (Typ.) 1602 MHz : 1.97 dB (Typ.)
SAW Filter	40dB min 1.0 ~ 960MHz 20dB min 1427~1463MHz 20dB min 1710~1785MHz 25dB min 1850~1980MHz 40dB min 2401~2483MHz
(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


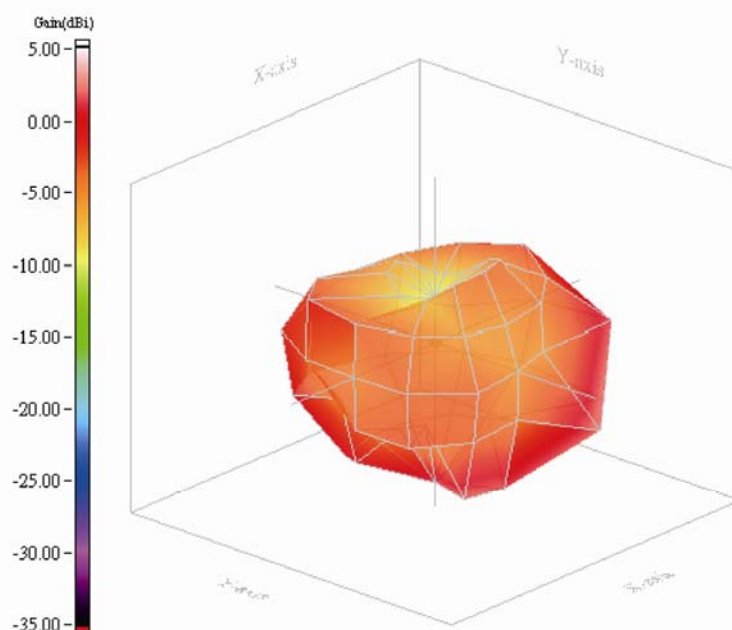
Length	22.0 +/- 0.2 mm
Width	6.0 +/- 0.2 mm
Thickness	1.9 ~ 2.1 mm
Cable	Diameter= 1.13 mm ; Length= 100 mm ; Black
Connector	I-PEX 20428
Shielding Case	10 × 5.2 × 1.3 mm ³



MECHANICAL DATA

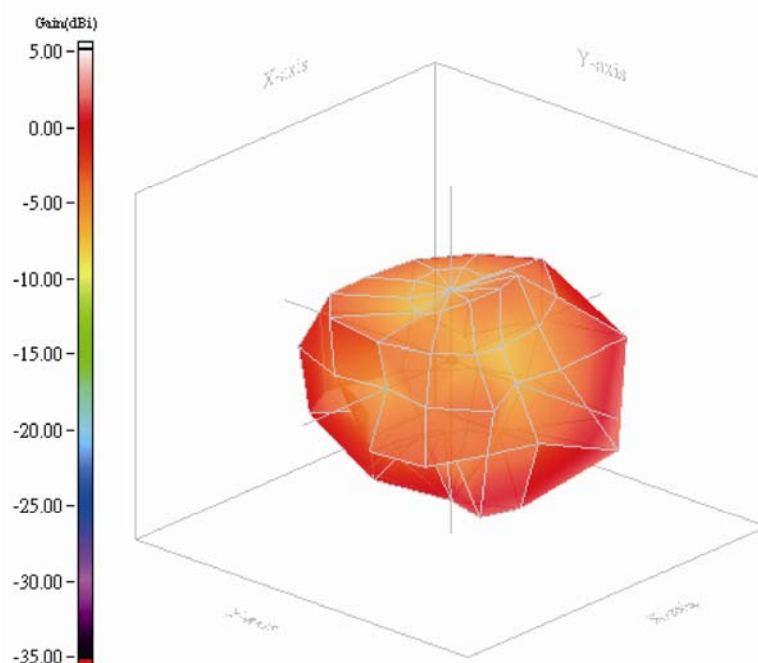
Test frequency

1575.00MHz



Test frequency

1602.00MHz

**Fig. 2** Radiation pattern

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
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Version 0	May 02, 2013	-	- New data sheet for Active antenna, SMD Feed size 22×6×1.9 mm
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