

Description: 8010 GPS/Galileo&GLONASS
Chip Antenna

PART NUMBER: ANT8010LL05R1516A

Features:

- Size : 8.0x1.0x1.0 mm
- 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

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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For more information:



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ELECTRICAL SPECIFICATIONS

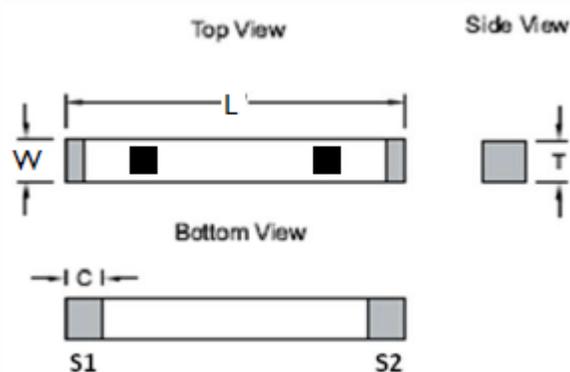
Working Frequency	1.575 / 1.602 GHz
Bandwidth	80 MHz(Typ.)
Return Loss	10.0 dB Min
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	GPS / Galileo 1.53 dBi (Typ.) GLONASS 1.69 dBi (Typ.)
Impedance	50 Ω
Operating Temperature	- 40~105 °C
Maximum Power	1 W
Termination	Ni / Sn (Environmentally-Friendly Leadless)
Resistance to Soldering Heats	260°C , 10sec.

NOTE

1. The specification is defined on Pulse evaluation board

MECHANICAL DRAWING

	Dimension
L (mm)	8.00 ±0.20
W (mm)	1.00 ±0.20
T (mm)	1.00 ±0.20
A (mm)	0.90 ±0.15



Terminal name	Function
S1	Feeding / Soldering Point
S2	Soldering / Feeding Point

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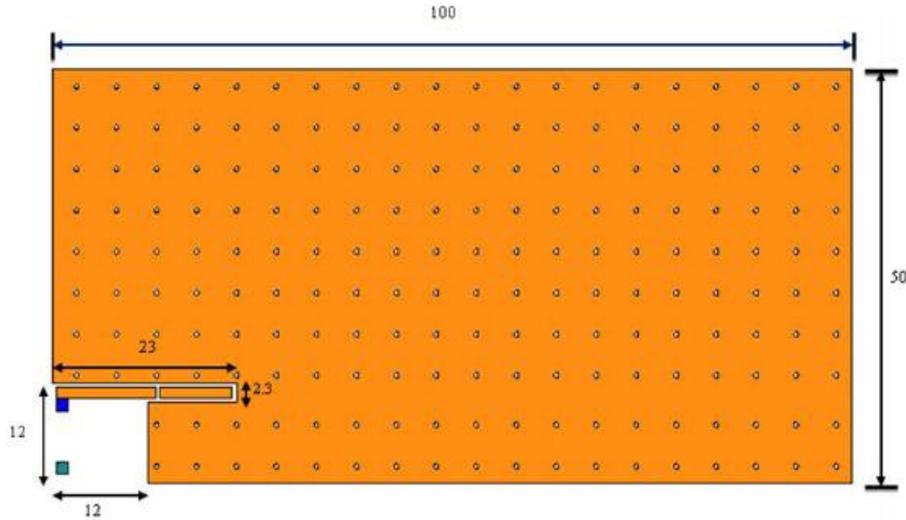
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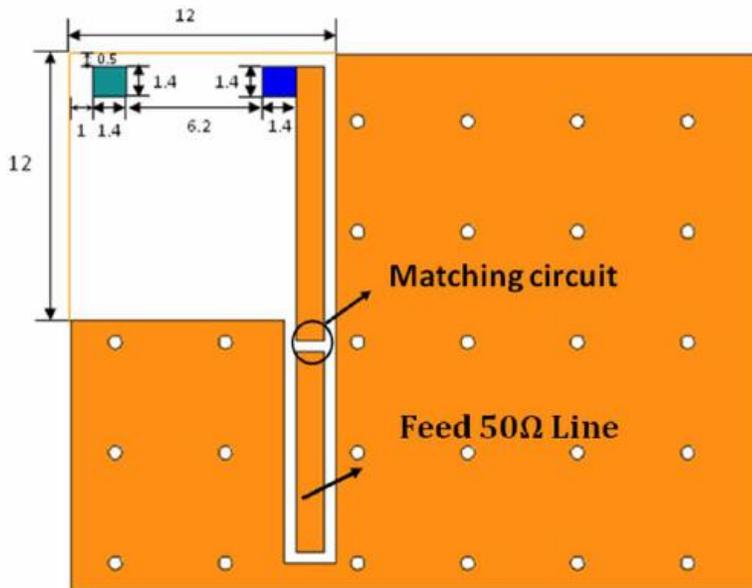
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REFERENCE DESIGN OF EVALUATION BOARD



■ Copper⁺
 ○ Ground via hole⁺
 ■ Feed contact⁺
 ■ Solder pad⁺
 Unit: mm : Tol : ± 0.15

Outlook and dimension of evaluation board



■ Soldering Pads of Chip Antenna
 ■ Footprint for Feeding

Details of soldering Pad

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ELECTRICAL PERFORMANCES



Return loss

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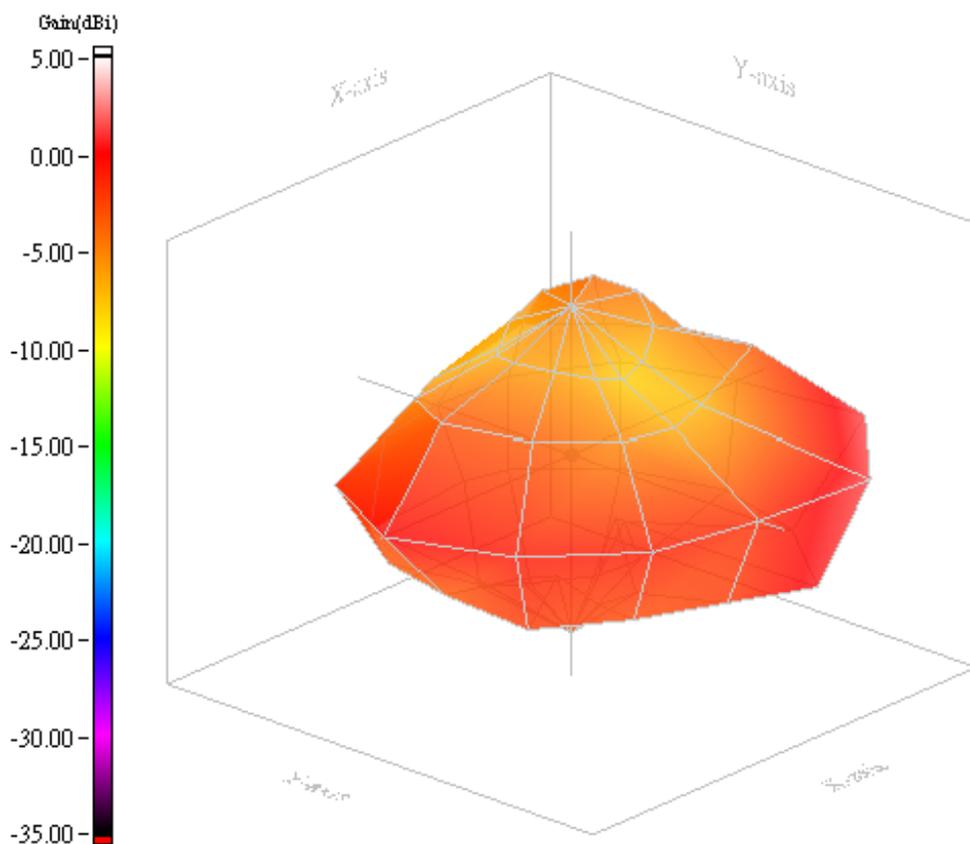
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ELECTRICAL PERFORMANCES



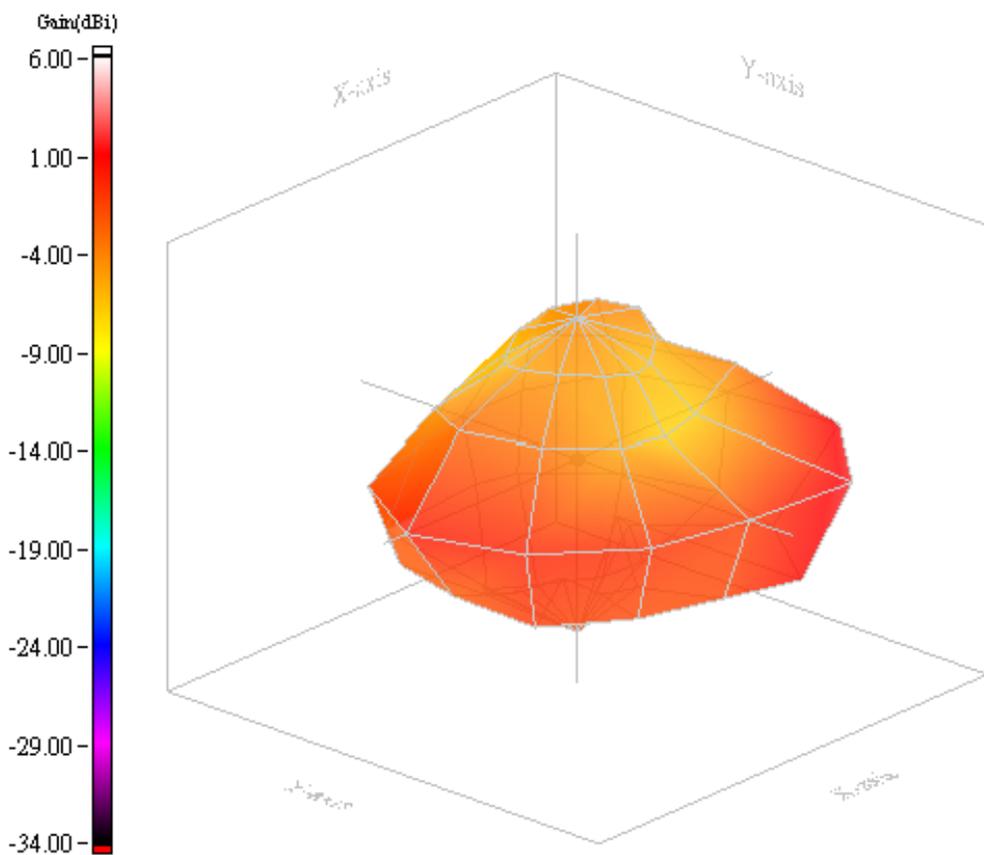
Max gain= 1.53dBi, at (90, 150)
MEG(mean effective gain)=-3.51dBi
Directivity(dB)= 4.66
Efficiency= -3.13dB, 48.69%

Radiation Pattern (Frequency = 1575MHz)

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Max gain= 1.69dBi, at (90, 120)
 MEG (mean effective gain)= -2.98dBi
 Directivity(dB)= 4.48
 Efficiency= -2.79dB, 52.60%

Radiation Pattern (Frequency = 1602MHz)

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REVISION HISTORY

Revision	Date	Description
Version 1	Oct. 14, 2020	- New issue