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Pulse | LARSEN Antennas
A YAGEO Company

TECHNICAL DATA SHEET

Description: 8010 GPS 1.5GHz Chip Antenna

PART NUMBER: ANT8010LL05R1575A



Features:

- Size : 8.0x1.0x1.0 mm
- High radiation efficiency
- Reflow process compatible (SMD only)
- RoHS compliant

Applications:

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

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RoHS COMPLIANT

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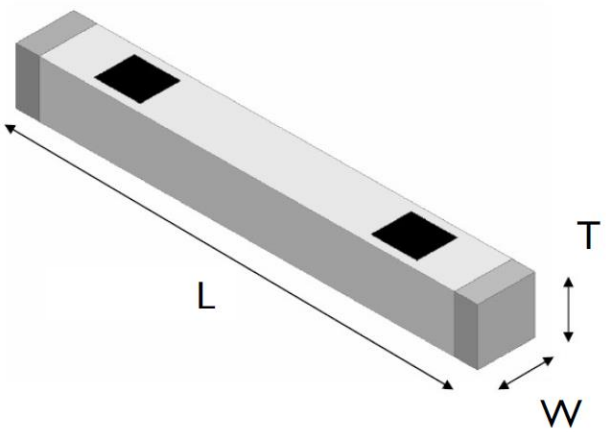
ELECTRICAL SPECIFICATIONS

Centre Frequency	1.575 GHz
Bandwidth	50 MHz (Typ.)
Return Loss	10 dB Min
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	0.67 dBi(Typ.)
Impedance	50 Ω
Operating Temperature	- 40~105 ℃
Maximum Power	1 W
Termination	Ni / Sn (Environmentally-Friendly Leadless)
Resistance to Soldering Heats	260℃ , 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



Unit: mm

Antenna outlines

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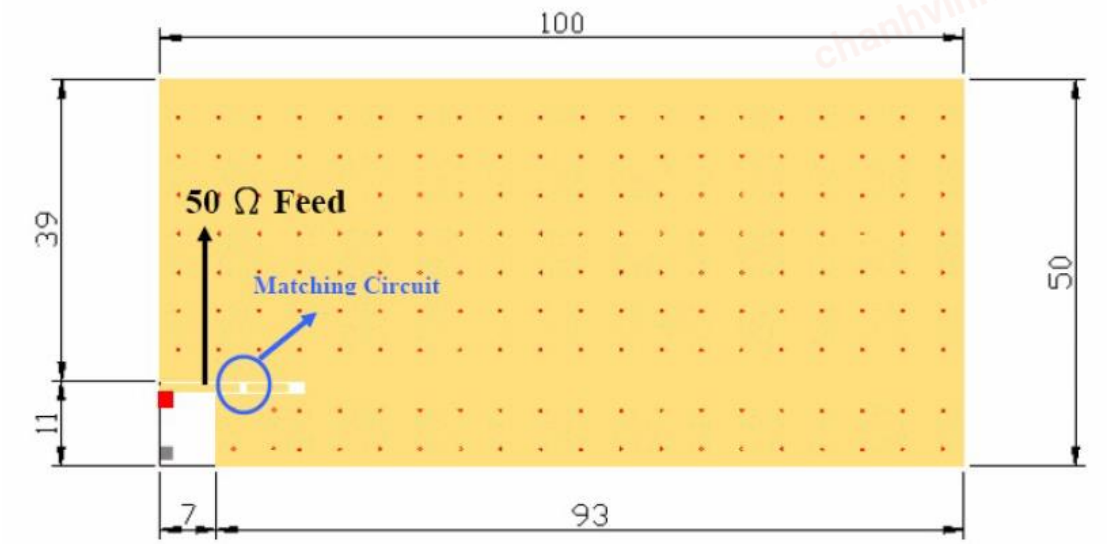
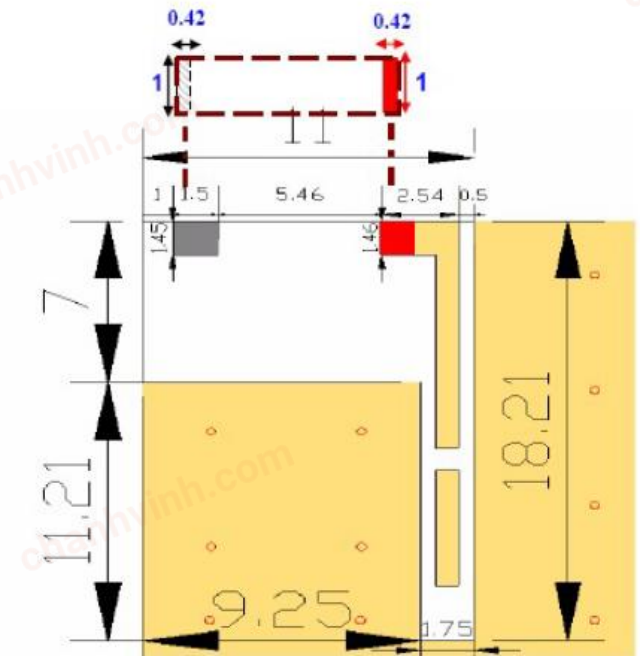
REFERENCE DESIGN OF EVALUATION BOARD



Unit: mm

Copper **Ground via hole** **Feed contact** **Solder pad**

Outlook and dimension of evaluation board



Tol : ±0.15
Unit : mm

Position of the Chip Antenna **Soldering Pads of Chip Antenna** **Footprint for Feeding**

Details of soldering Pad

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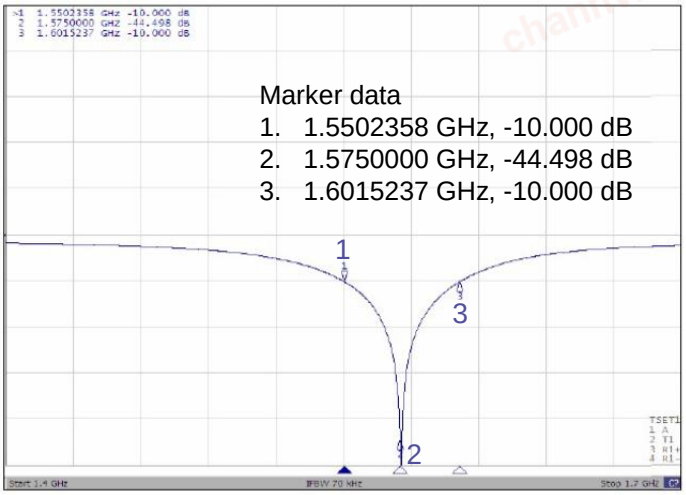
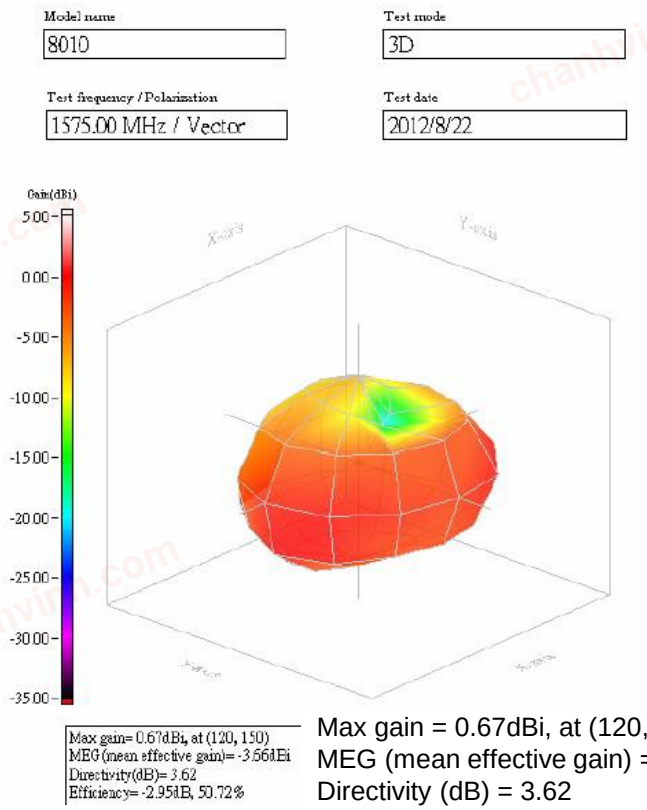
ELECTRICAL PERFORMANCES



Return loss



Max gain = 0.67dBi, at (120,150)
MEG (mean effective gain) = -3.66dBi
Directivity (dB) = 3.62
Efficiency = -2.95 dB, 50.72 %

Radiation pattern

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REVISION HISTORY

Revision	Date	Description
Version 1	Feb. 18, 2020	- New issue for Pulse version.

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