

Description: 3216 GPS Chip Antenna

PART NUMBER: ANT3216LL15R1575A

Features:

- Size : 3.2x1.6x1.2 mm
- High radiation efficiency
- Reflow process compatible
- RoHS compliant



Applications:

- Tablet
- 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

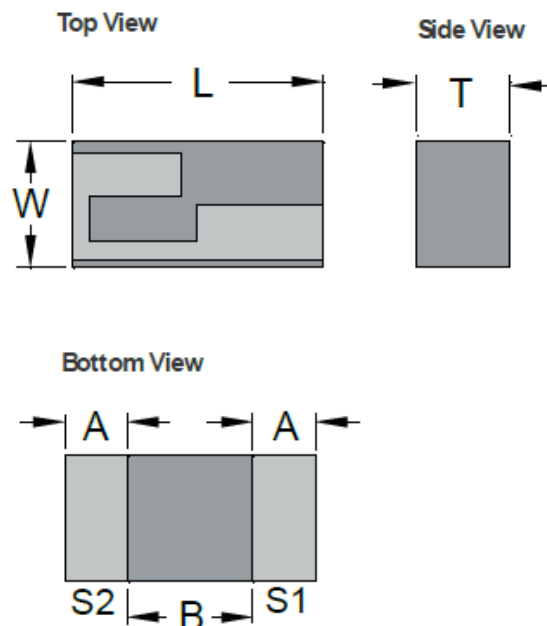
Working Frequency	1.575 GHz
Bandwidth	51MHz(Typ.)
Return Loss	10.0 dB Min
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	2.01 dBi(Typ.)
Impedance	50 Ω
Operating Temperature	- 40~105 $^{\circ}\text{C}$
Maximum Power	1 W
Termination	Ag (Environmentally-Friendly Leadless)
Resistance to Soldering Heats	260 $^{\circ}\text{C}$, 10sec.

NOTE

1. The specification is defined on Pulse evaluation board

MECHANICAL DRAWING

	Dimension
L (mm)	3.20 $\pm$ 0.10
W (mm)	1.60 $\pm$ 0.10
T (mm)	1.20 $\pm$ 0.10
A (mm)	0.80 $\pm$ 0.15
B (mm)	1.60 $\pm$ 0.20



Terminal name	Function
S1	Feeding Point
S2	GND

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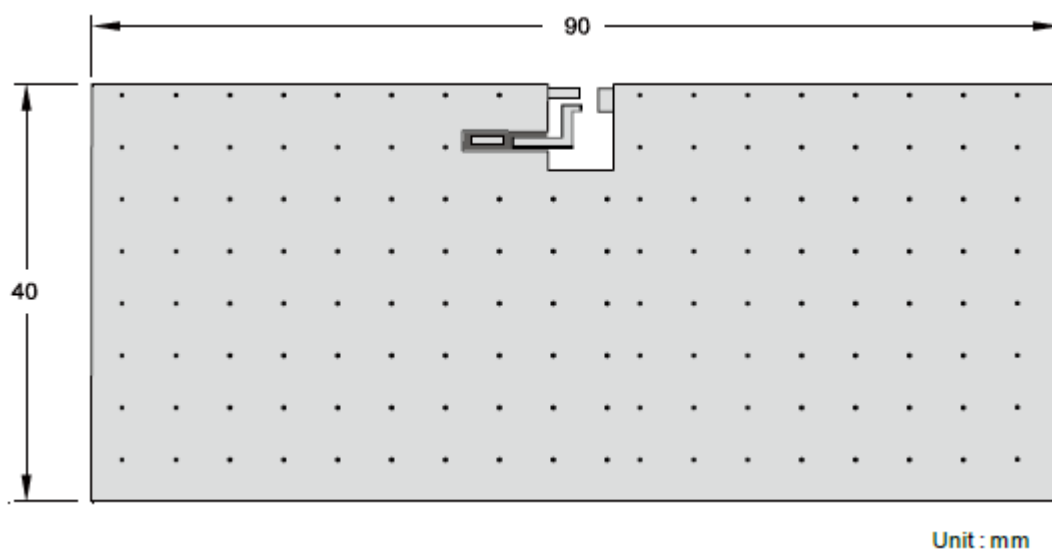
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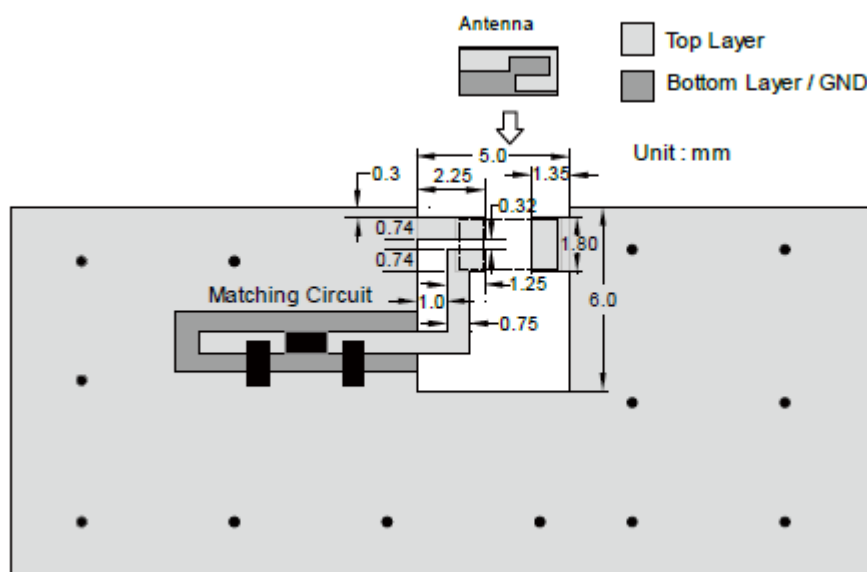
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REFERENCE DESIGN OF EVALUATION BOARD



Outlook and dimension of evaluation board



Details of soldering Pad

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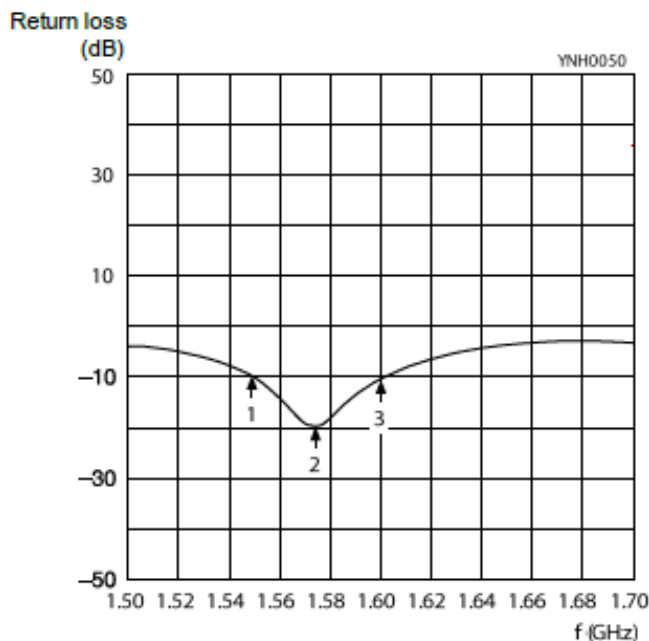
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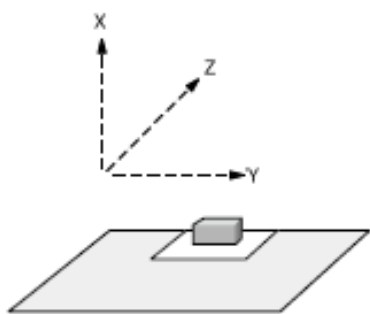
ELECTRICAL PERFORMANCES



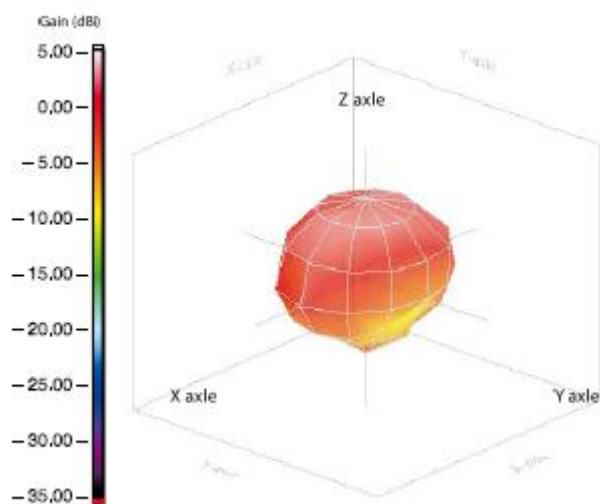
Marker data

1. 1.551GHz, -10dB
2. 1.575GHz, -20.1dB
3. 1.602GHz, -10dB

Return loss



Evaluation board and XYZ direction



Max gain = 2.01 dBi, at (30,30)
MEG (mean effective gain) = -0.62dBi
Directivity (dB) = 3.53
Efficiency = -1.52 dB, 70.51%

Radiation pattern

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REVISION HISTORY

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