

**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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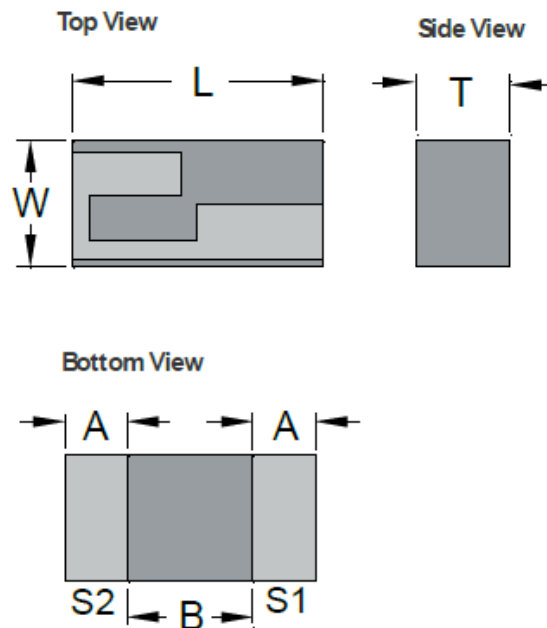
ELECTRICAL SPECIFICATIONS

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

NOTE  
1. The specification is defined on Pulse evaluation board

MECHANICAL DRAWING

	<b>Dimension</b>
L (mm)	3.20 ±0.10
W (mm)	1.60 ±0.10
T (mm)	1.20 ±0.10
A (mm)	0.80 ±0.15
B (mm)	1.60 ±0.20



<b>Terminal name</b>	<b>Function</b>
S1	Feeding Point
S2	GND

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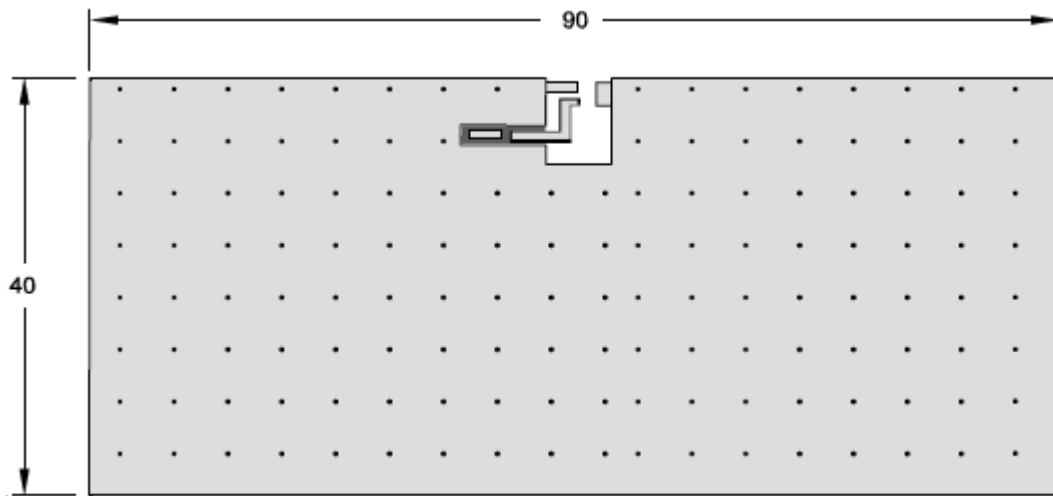
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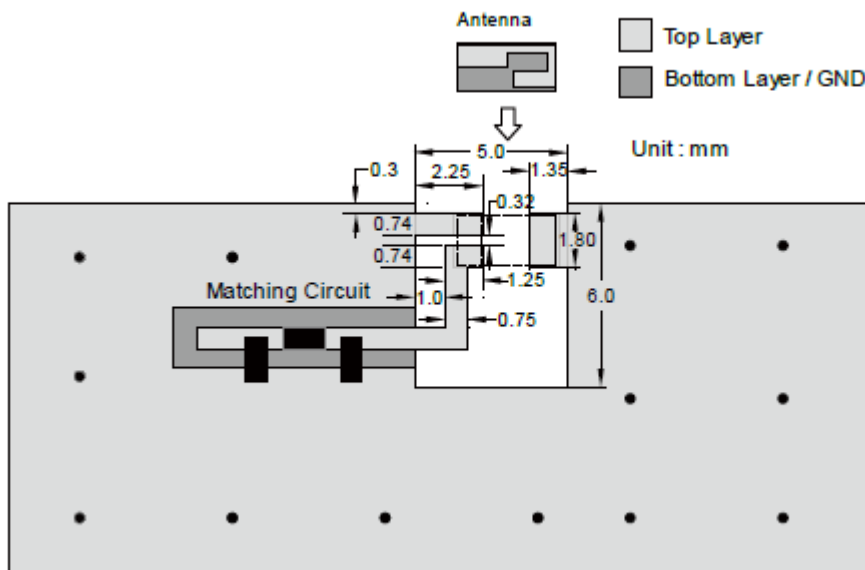
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**REFERENCE DESIGN OF EVALUATION BOARD**



Unit : mm

Outlook and dimension of evaluation board



YNH0049\_1

Details of soldering Pad

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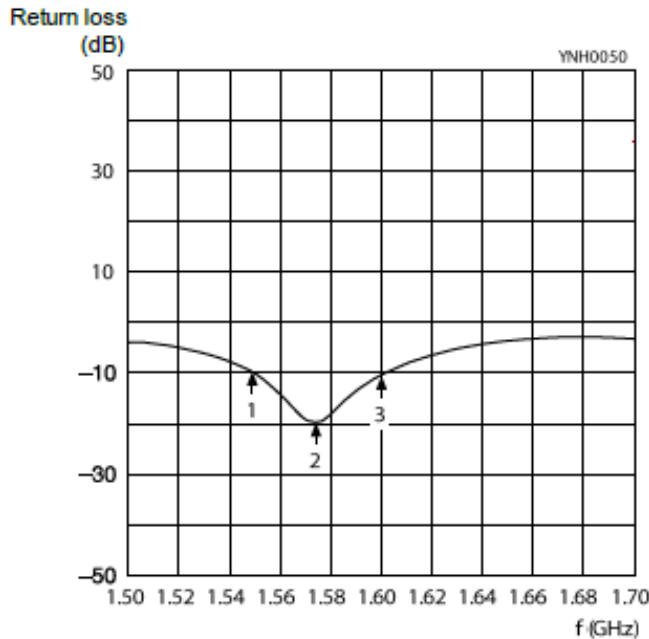
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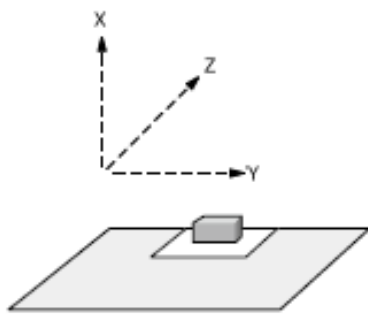
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**ELECTRICAL PERFORMANCES**



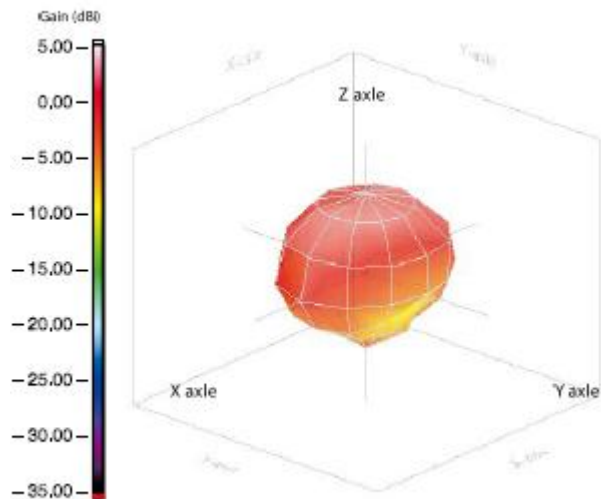
Marker data  
 1. 1.551GHz, -10dB  
 2. 1.575GHz, -20.1dB  
 3. 1.602GHz, -10dB

Return loss



Evaluation board and XYZ direction

Radiation pattern



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

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### REVISION HISTORY

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

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