



TopGain

SPECIFICATION

DESCRIPTION	Chip Antenna
PART NO.	CH2G4-3216-000D1-01
VERSION	V01

頂益科技有限公司

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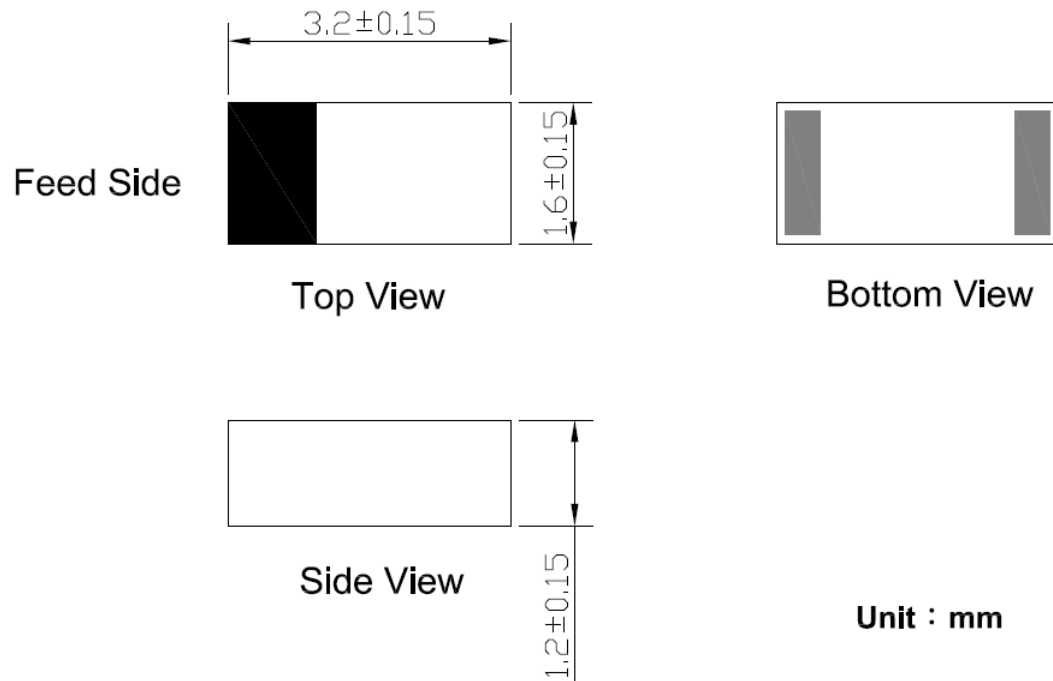
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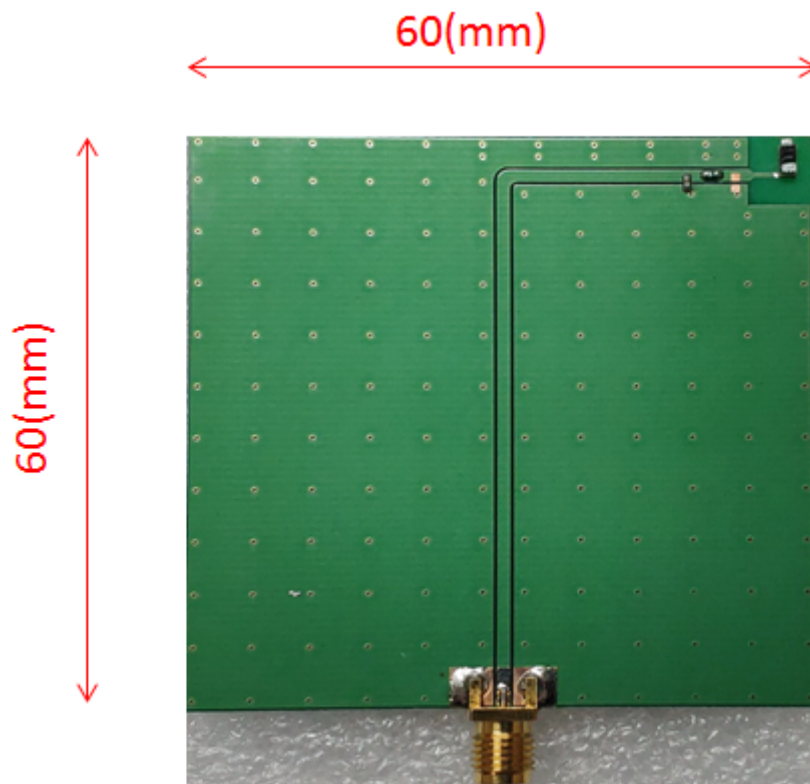
1. Antenna Specification

Outline Dimensions	3.2x1.6x1.2(mm)
Ground Plane	60×60(mm)
Frequency Range	2.4GHz ~ 2.5GHz
Impedance	50 Ohm Nominal
Bandwidth (under -10dB return loss)	100MHz (Typ.)
Radiation	Omni-directional
Peak Gain	2.08 dBi (Typ.)
Efficiency	44% (Typ.)
Polarization	Linear Polarization
Storage Temp	-25℃ ~ +85℃
Color	Black

2. Antenna Dimension

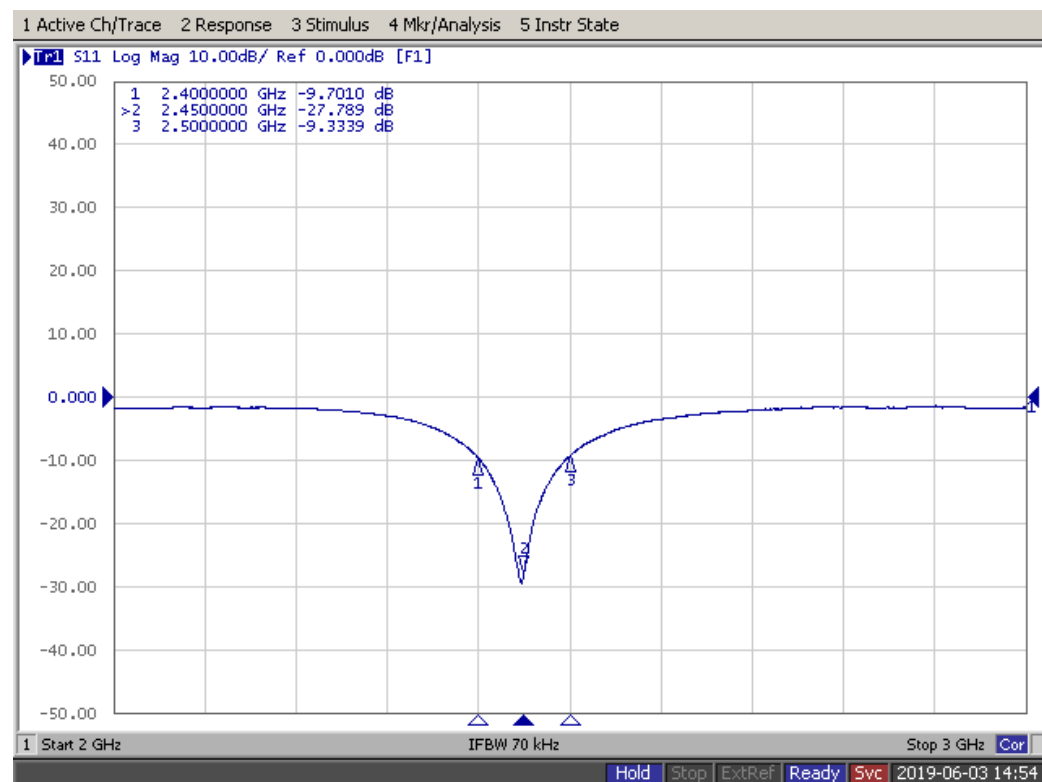


3. Test Data



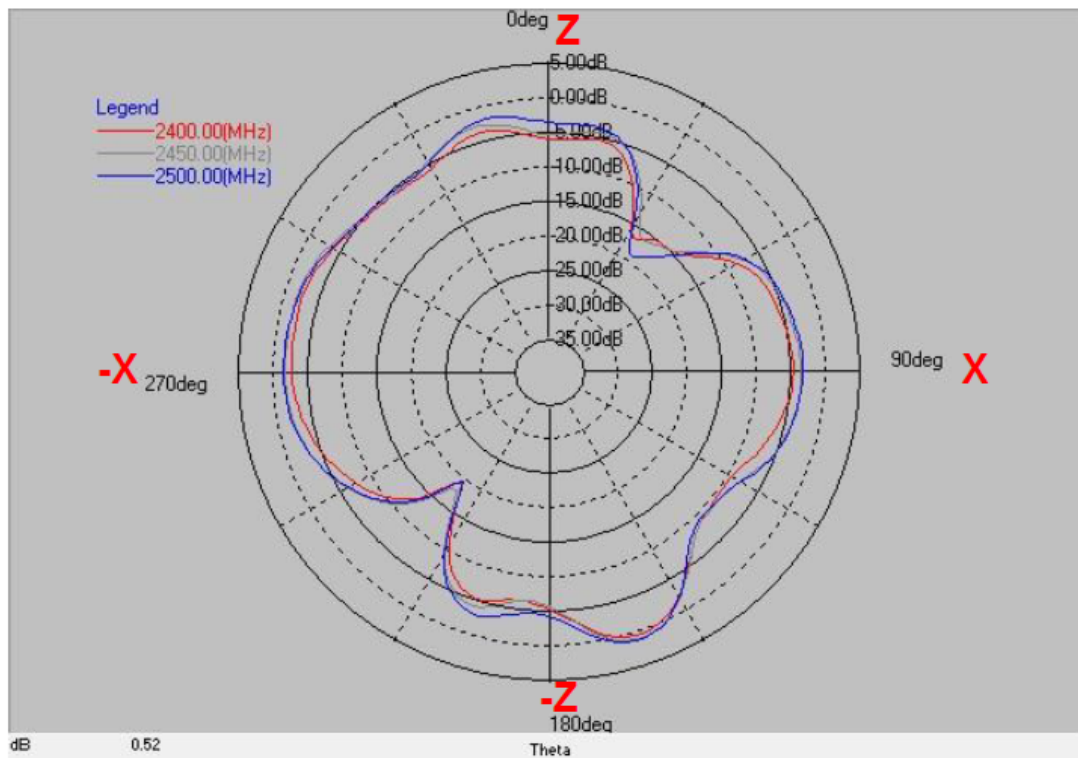
3.1 ELECTRICAL CHARACTERISTICS

S11



Frequency(MHz) : 2400~2500. Pattern Field : Z-X plane

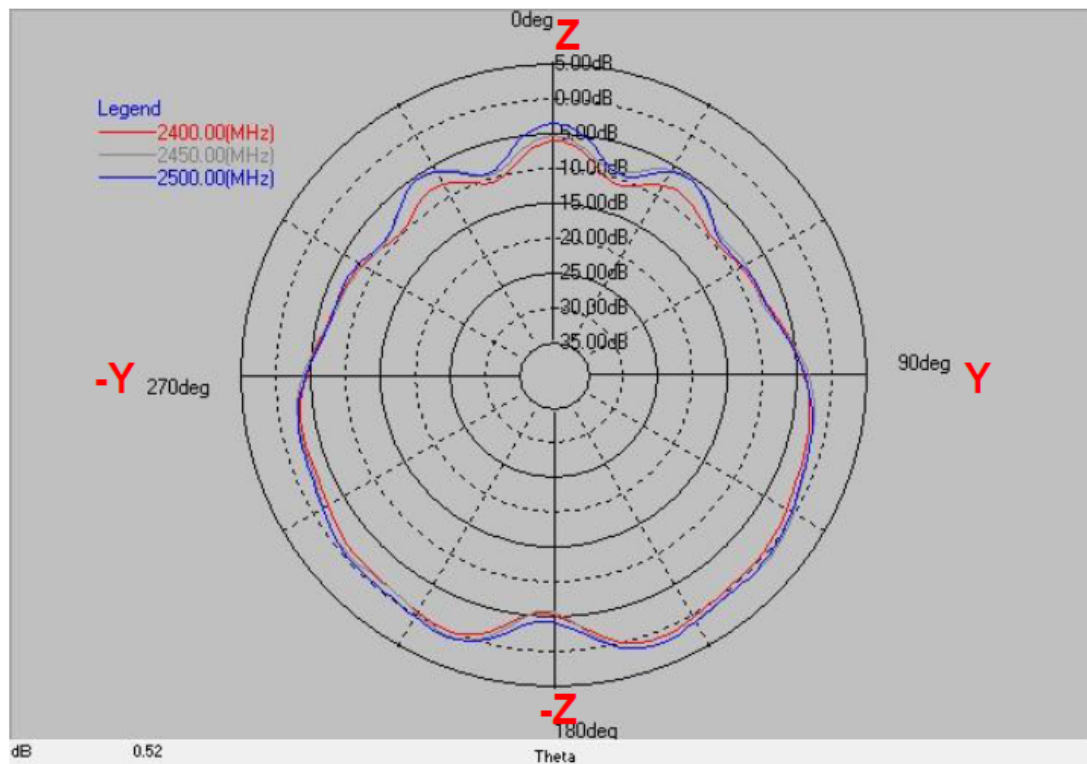
Phi=0
Z-X



Frequency	Pick Gain
2400(MHz)	0.37 dB
2450(MHz)	0.89 dB
2500(MHz)	1.17 dB

Frequency(MHz) : 2400~2500. Pattern Field : Z-Y plane

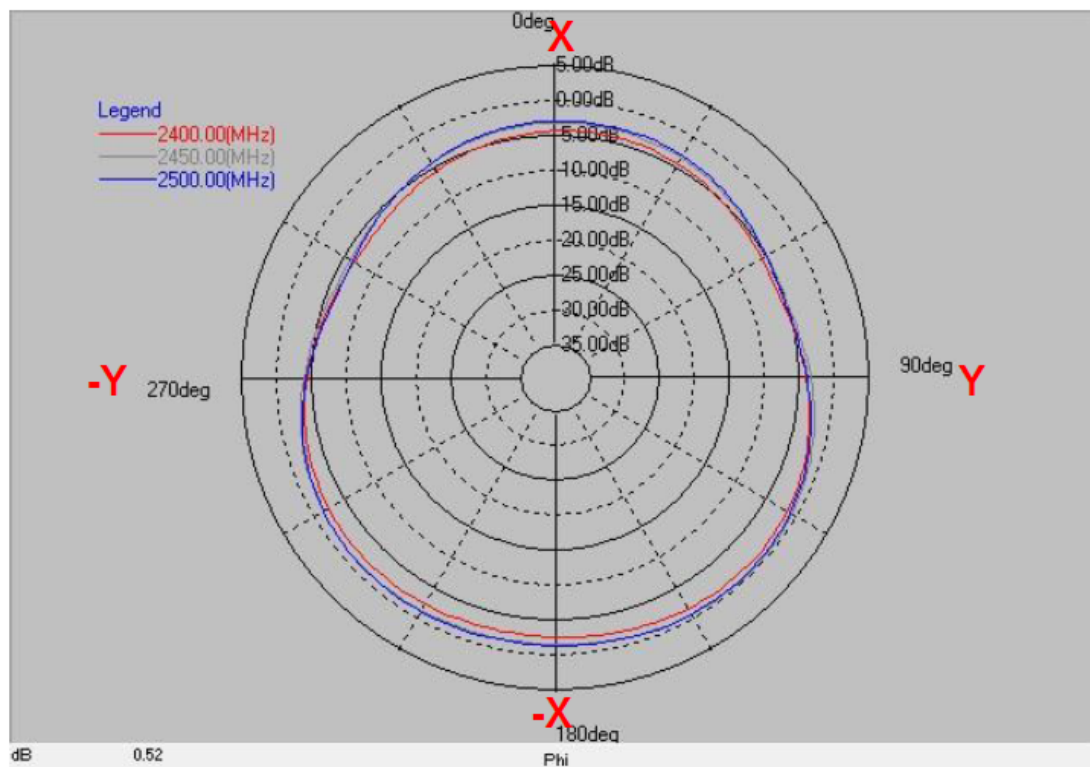
**Phi=90
Z-Y**



Frequency	Pick Gain
2400(MHz)	0.87 dB
2450(MHz)	1.68 dB
2500(MHz)	1.58 dB

Frequency(MHz) : 2400~2500. Pattern Field : X-Y plane

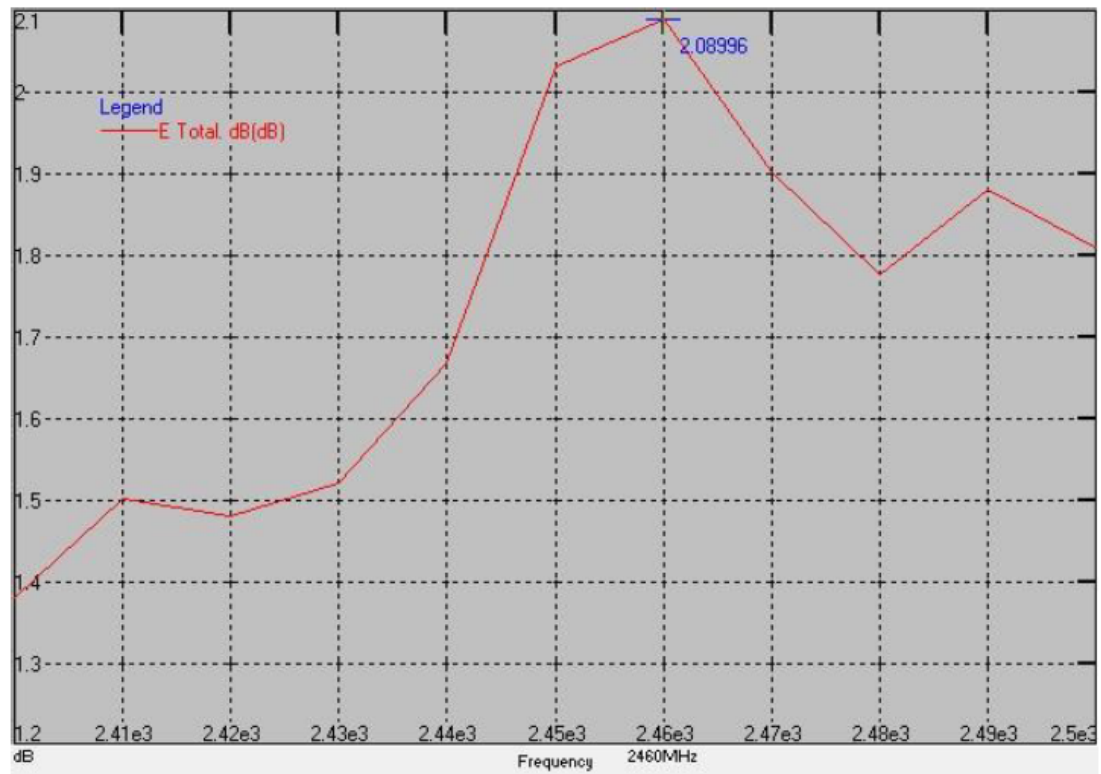
Theta=90
X-Y



Frequency	Pick Gain
2400(MHz)	-1.31 dB
2450(MHz)	-0.44 dB
2500(MHz)	-0.58 dB

3.3 Antenna Peak Gain

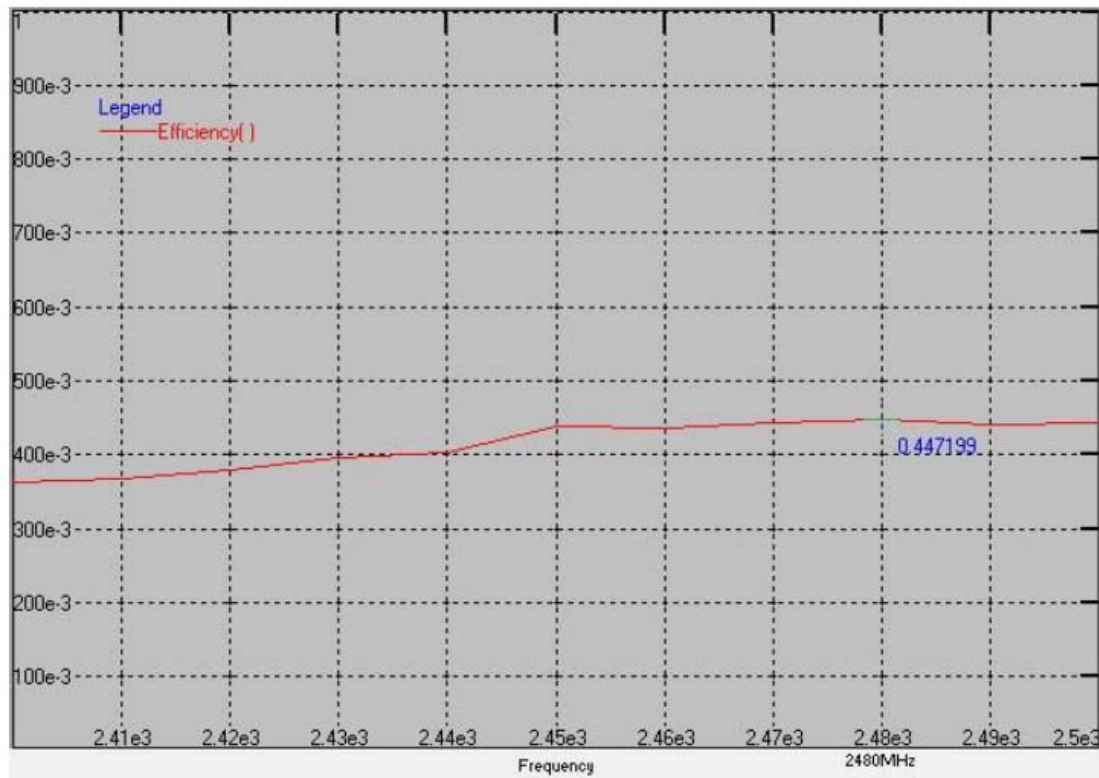
Frequency(MHz) : 2400~2500.



Peak Gain : Max 2.08 dBi @ 2460 MHz

3.4 Antenna Efficiency

Frequency(MHz) : 2400~2500.



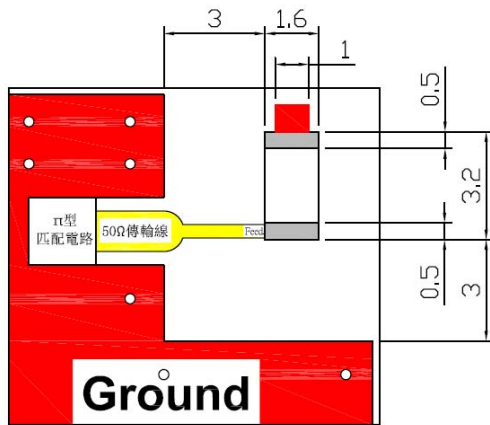
Efficiency : Max 44 % @ 2480 MHz

4. Layout Guide:

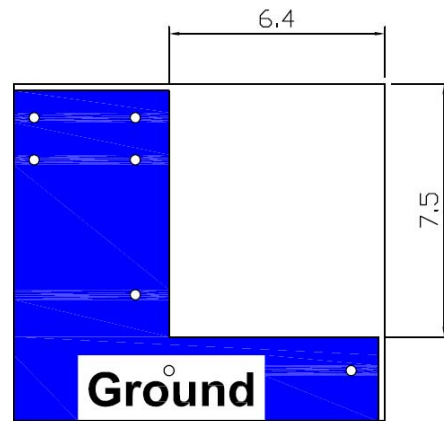
a. Solder Land Pattern:

Land pattern for soldering (black marking areas) is as shown below.

Matching circuit is needed for good performance, when customer's device is different.



Top Layout



Bottom Layout

5. Soldering Conditions:

a. Typical Soldering Profile for Lead-free Process

