



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# Antenna Specification

## ■ ELECTRICAL PROPERTIES

- 1.1 Frequency Range.....2.4GHz ~2.5GHz
- 1.2 Impedance.....50 Ohm Nominal
- 1.3 VSWR.....2 (Max)
- 1.4 Return Loss.....-10dB (Max)
- 1.5 Radiation.....Omni-directional
- 1.6 Gain(peak).....2.21dBi
- 1.7 Polarization.....Linear Vertical
- 1.8 Admitted Power.....1W

## ■ PHYSICAL PROPERTIES

- 2.1 Cable.....Coaxial Cable § 1.13 Black
- 2.2 Antenna Material.....FR4(黑漆噴錫板)
- 2.3 Operating Temp.....-25°C ~ +75°C
- 2.4 Storage Temp.....-30°C ~ +75°C
- 2.5 Connector.....IPEX 4 Compatible



# Mechanical Specification

RoHS COMPLIANT

## MECHANICAL

Body :FR4(黑色噴錫板)

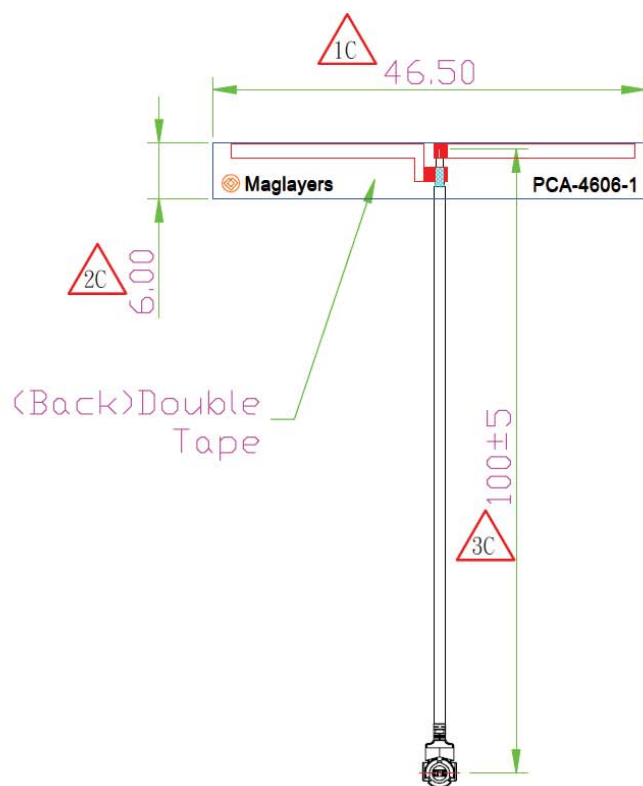
Double Tape:3M 467

## ELECTRICAL

Frequency : 2.4GHz

Cable : Coaxial Cable  $\phi$  1.13(Black)

Connector:IPEX 4 Compatible

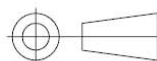


△	New Release	03/11/13	HWCHAN
LTR	DESCRIPTION	DATE	REQ. BY
設計DR.	核准APPD.		
HWCHAN	Marco	2013/03/11	2013/03/11
版本說明		REVISION NOTE	
<b>MAGLAYERS</b>			

※凡標記△記號者,為品管檢驗之尺寸

容許公差	TOLERANCE
.XXX	±0.20
.XX	±0.35
.X	±0.50
X	±1.00
ANG	±5

品名  
ARTICLE  
**PCA-4606-2G4C1-A33**



單位 UNIT	比例 SCALE	張數 SHEET	版本 REV.
mm	****	1	A





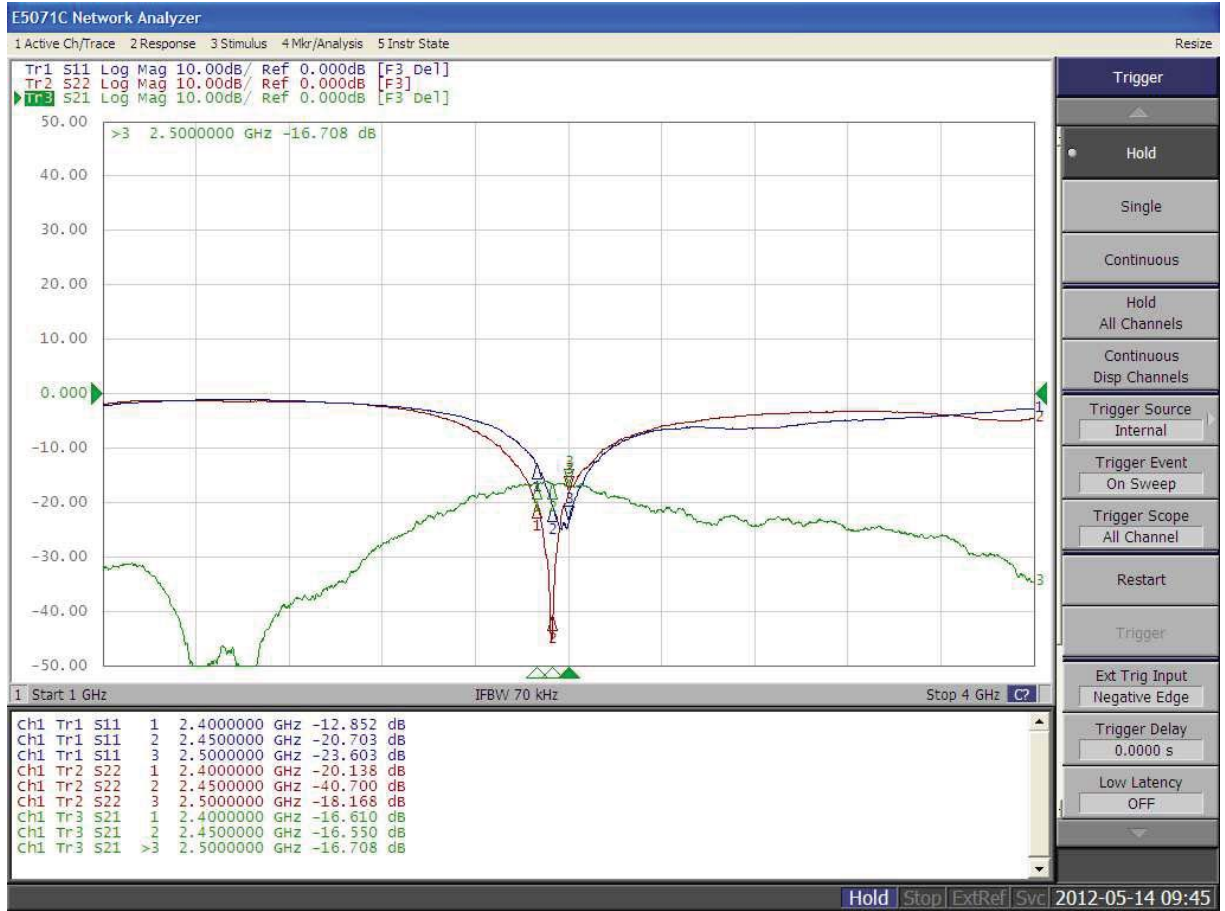
# Test Report

## ELECTRICAL CHARACTERISTICS

**P/NO: PCA-4606-2G4C1-A33**

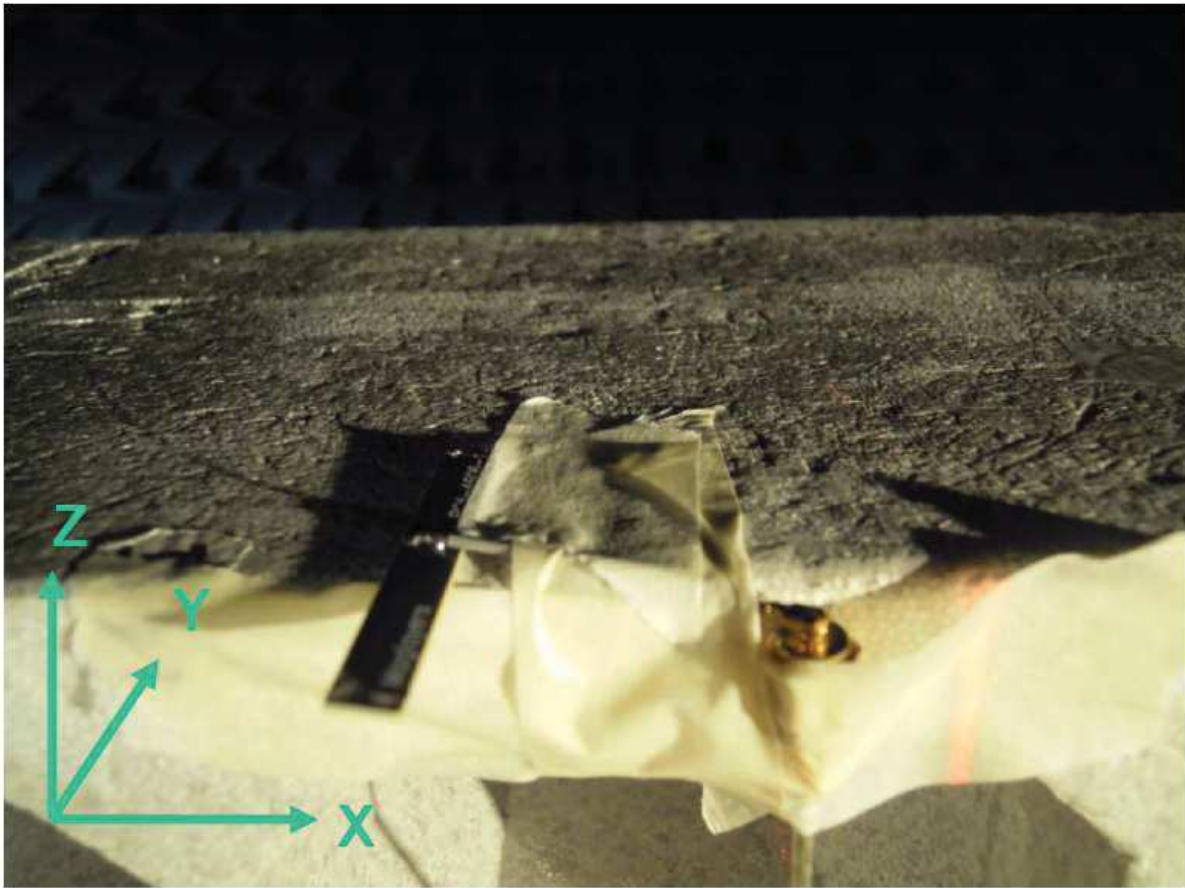
**Spec: 2.4GHz ~ 2.5GHz**

**S11**

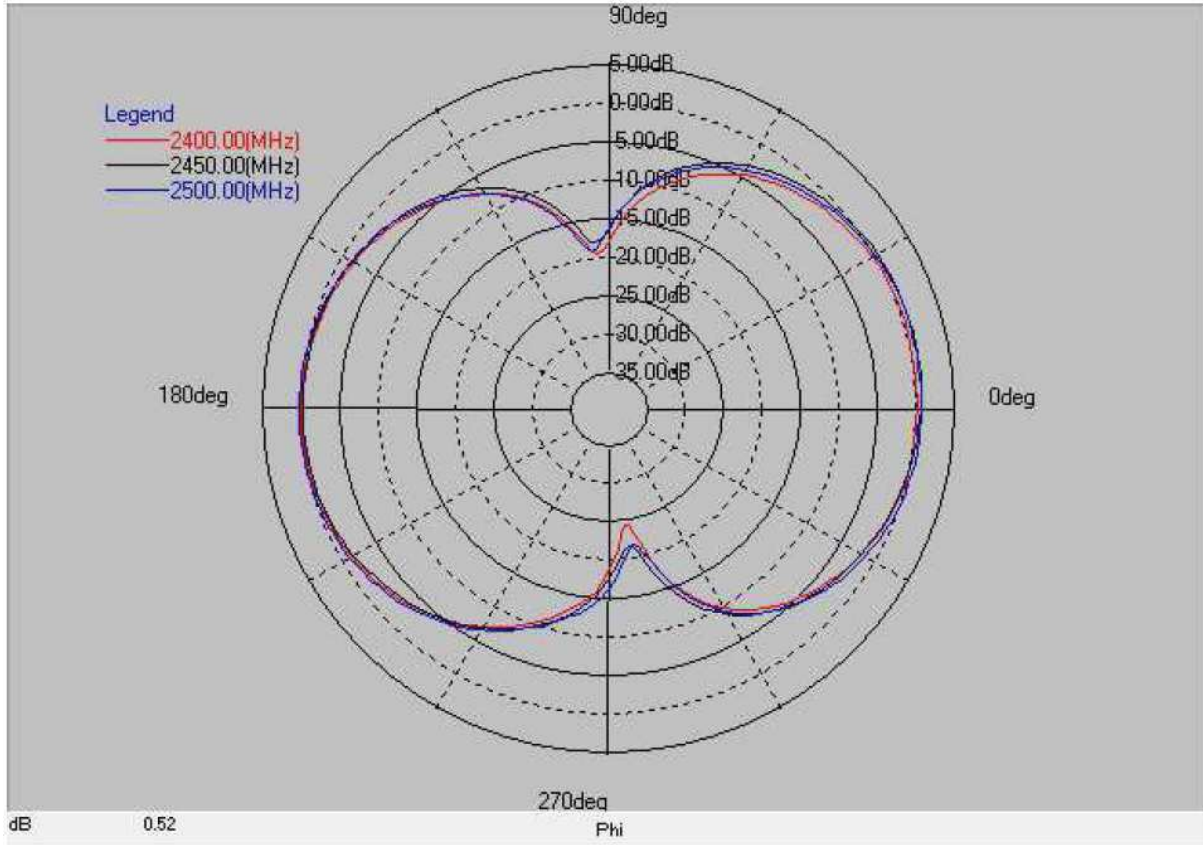


**MAG.LAYERS**

## ■ Experimental Setup

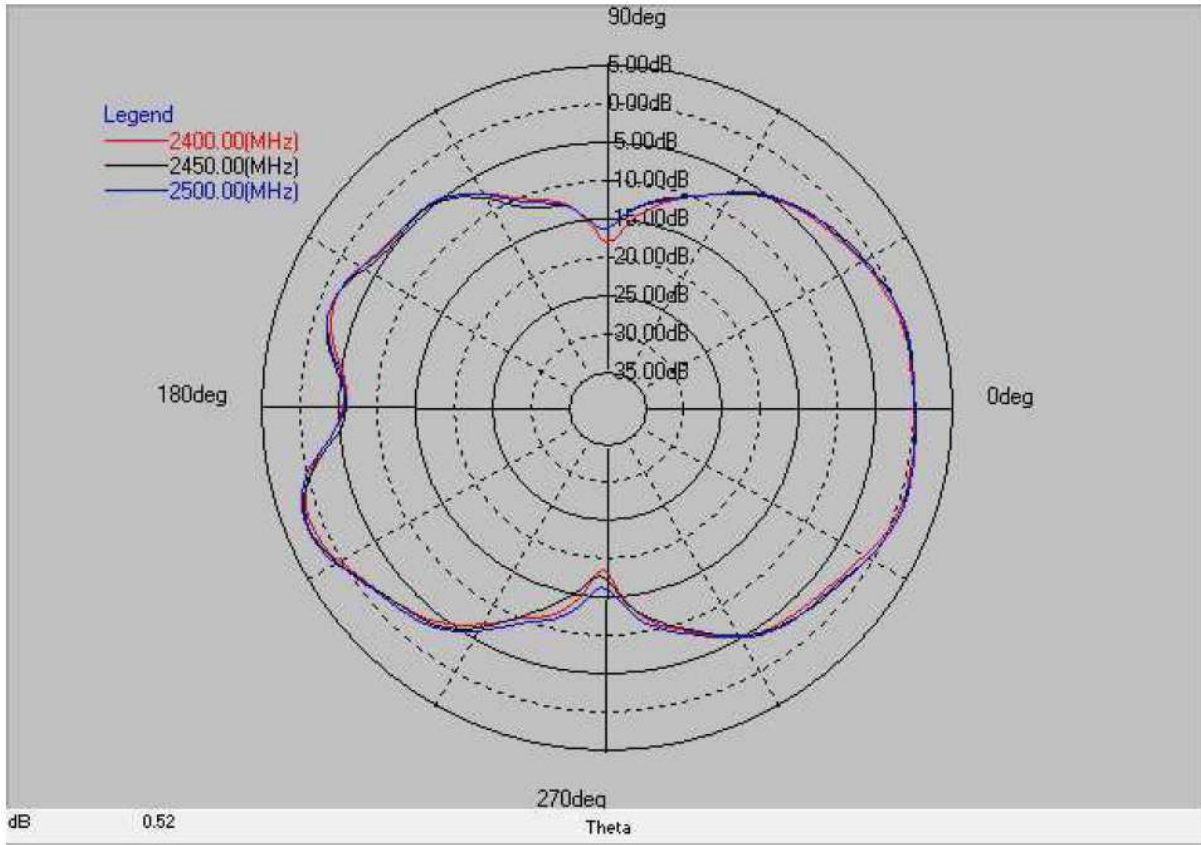


Frequency(MHz) : 2400~2500. Pattern Field : X-Z plane  
Gain . dB



Layer	Max value	Min value	Average
2400(MHz)	0.26 dB	-24.63 dB	-3.13 dB
2450(MHz)	0.97 dB	-21.94 dB	-2.80 dB
2500(MHz)	0.81 dB	-22.13 dB	-2.68 dB

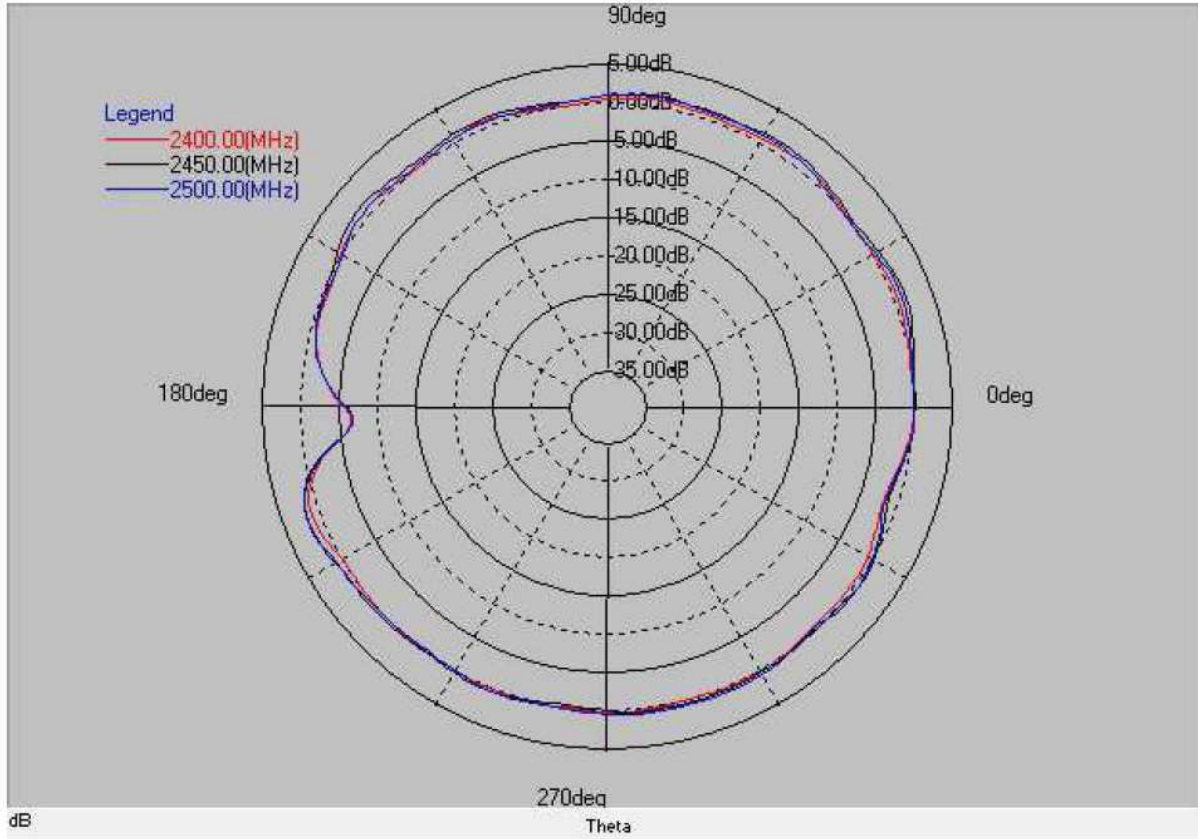
Frequency(MHz) : 2400~2500. Pattern Field : Y-Z plane  
Gain . dB



Layer	Max value	Min value	Average
2400(MHz)	1.48 dB	-18.90 dB	-3.41 dB
2450(MHz)	1.99 dB	-18.04 dB	-3.20 dB
2500(MHz)	2.21 dB	-16.54 dB	-3.06 dB

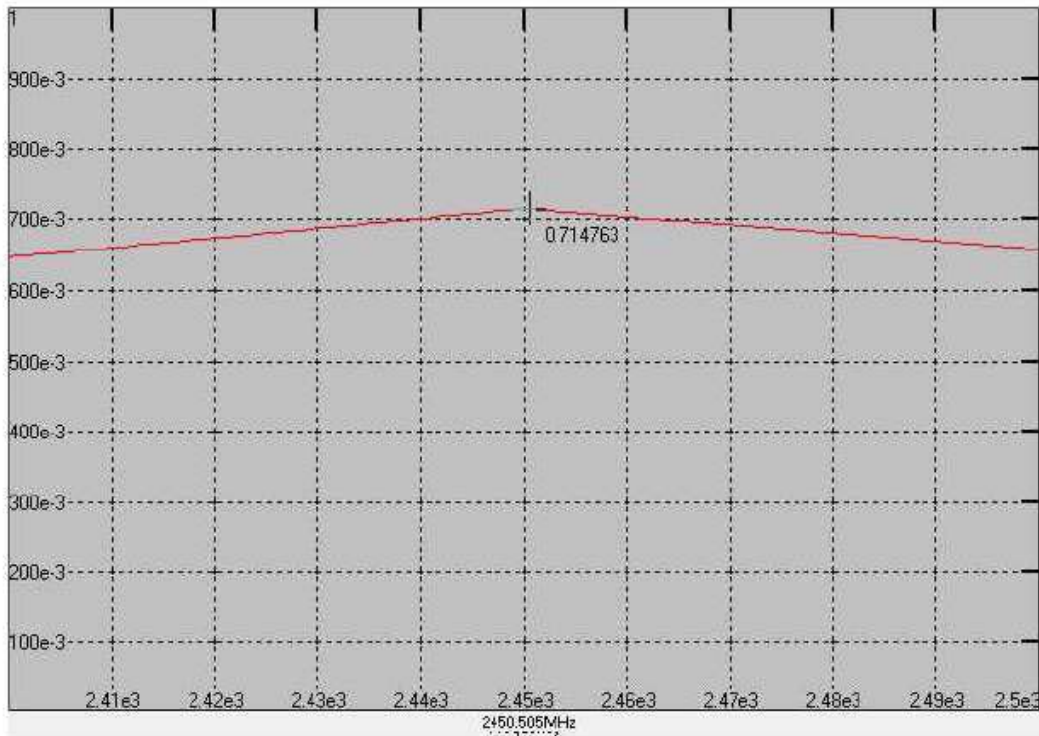


Frequency(MHz) : 2400~2500. Pattern Field : X-Y plane  
Gain . dB



Layer	Max value	Min value	Average
2400(MHz)	1.12 dB	-6.49 dB	-0.15 dB
2450(MHz)	1.93 dB	-6.78 dB	0.32 dB
2500(MHz)	1.84 dB	-6.65 dB	0.14 dB

Antenna efficiency



**Maximum Efficiency At 2.4-2.5 GHz : 71.47%**

