



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!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



APPROVAL SHEET

PCB ANTENNA

2.4 GHz Band Working Frequency

Halogens Free Product

P/N: RFPCA331630IMAB301

Customer : _____
Customer 's Part No. : _____
Approval No. : _____
Issue Date : _____

*Contents in this sheet are subject to change without prior notice.

Version	Date	Description	Author
V01	2015 Oct.	New Release	HWCHAN

ELECTRICAL CHARACTERISTICS

Item	Specification
Frequency Range	2.4 ~ 2.5 GHz
Impedance	50 Ohm Nominal
Return Loss	-10 dB (Max)
Peak Gain	3.96 dBi
VSWR	2.0 (Max)
Radiation	Omni-directional
Polarization	Linear Vertical
Admitted Power	1W

*note-1: Electrical characteristics will depend on customer's final application.

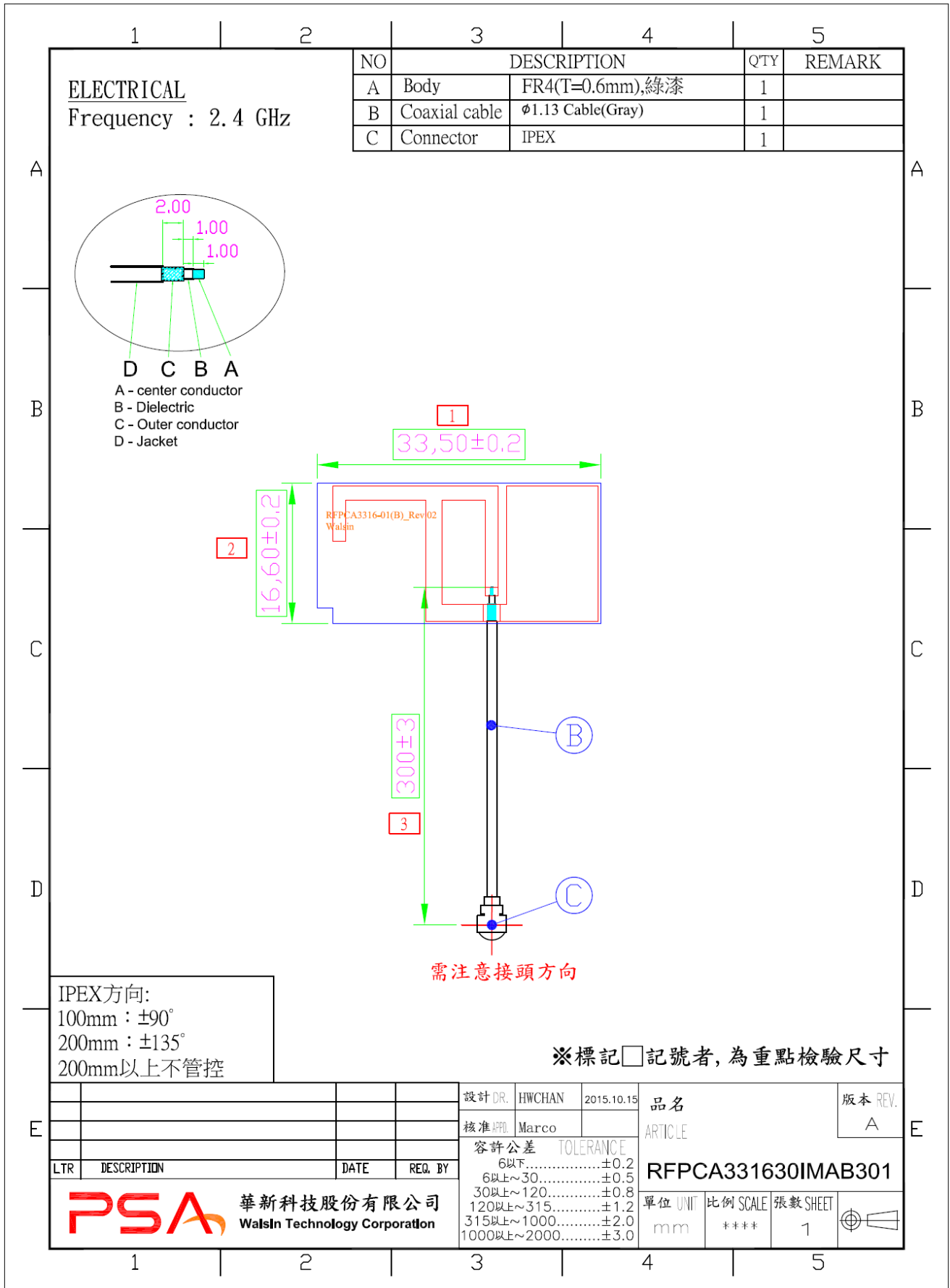
MATERIAL TABLE

Items	Description
Cable	∅ 1.13(Gray)
FPC Antenna	FR4(綠漆板) T=0.6mm
Connector	IPEX

ORDERING RULE

RF	PCA	3316	30	I	M	A	B	3	01
Type Code	Product Code	PCB Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
Walsin RF Device	PCA: PCB Antenna	Per 2 digits of length, width e.g.:3316 Length 33.5mm, Width 16.6mm	2 digits for cable length e.g.:30 Cable Length:30cm	A: N C:MCX D:IPEX III E: IPEX IV F: IPEX A13 H: Hirose I: IPEX M: MMCX S: SMA T: TNC U:MURATA N: None	A: Reverse Female B: Reverse Male F: Female M: Male N: None	0: 0GHz 3: 3GHz 5: 5GHz 6: 6GHz A: 2.4GHz ISM band B: GSM 900/1800 dual band G: GPS band L: 2.4/5.2/5.8 GHz tri-band N: NFC T: LTE band W: WCDMA band	B: MP T:Durin g Test X: Pile Run	0:None 1:∅ 0.81 3:∅ 1.13 6:RG316 7:∅ 1.37 8:RG178	01~99 series number

Appendix A: Dimensions



Test Report

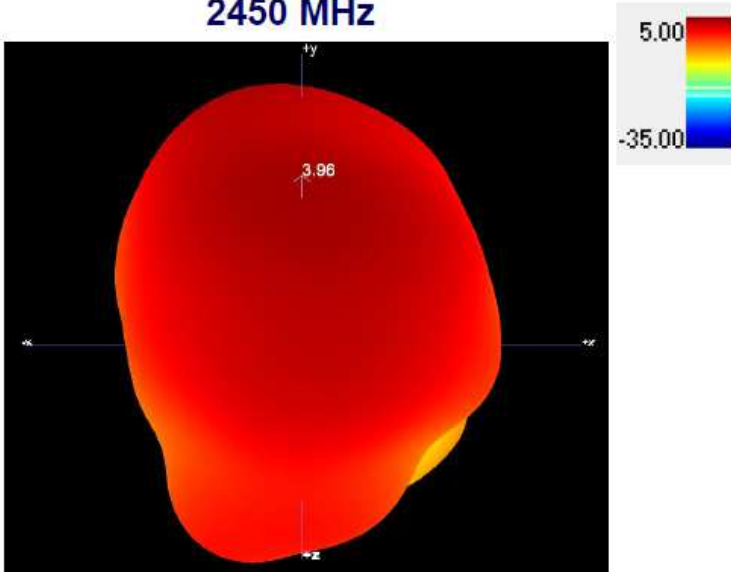
ELECTRICAL CHARACTERISTICS

Return Loss

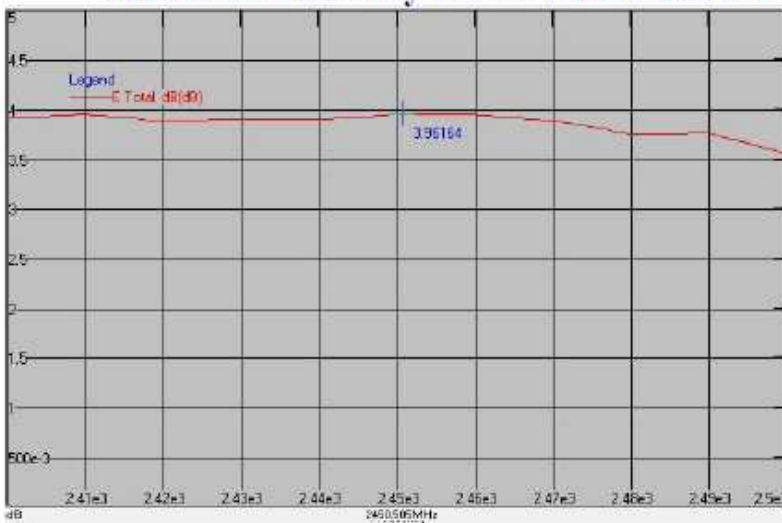


Antenna Efficiency & Peak Gain

2450 MHz



Maximum Efficiency at 2490 MHz : 67.18%



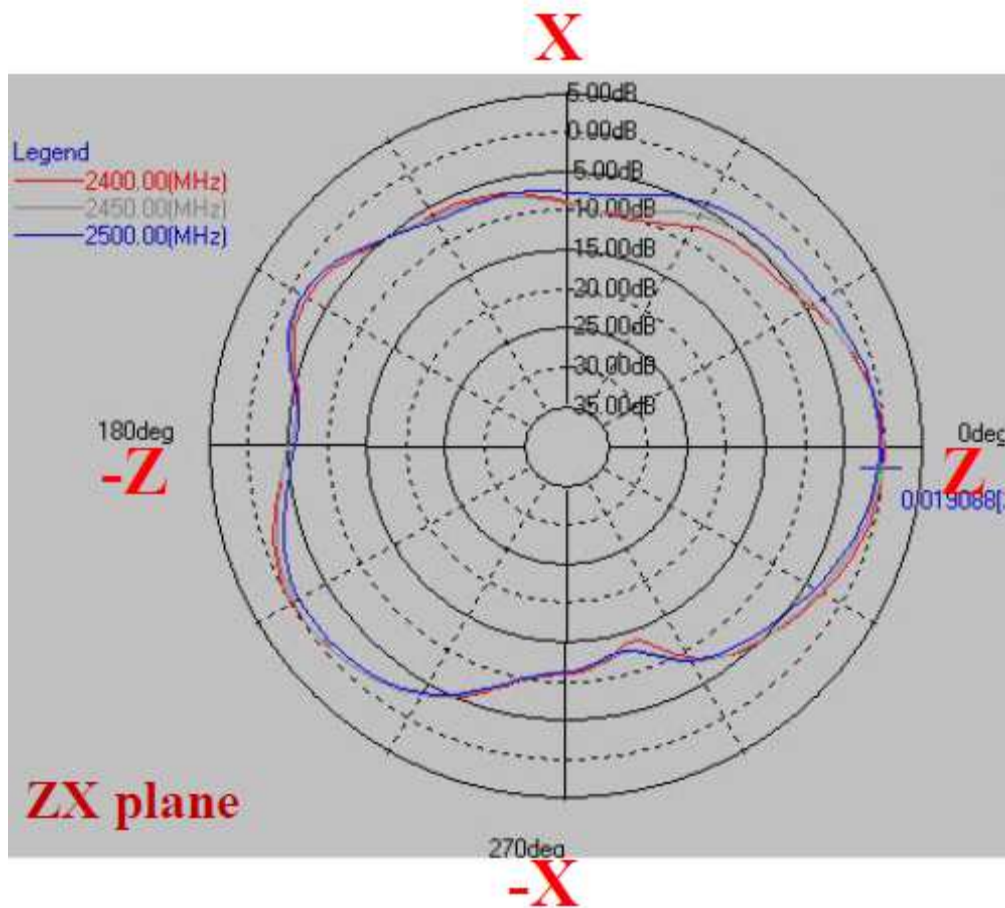
Maximum Peak Gain at 2450 MHz : 3.96 dBi

RADIATION PATTERN

2400~2500 MHz

Phi=0.00deg

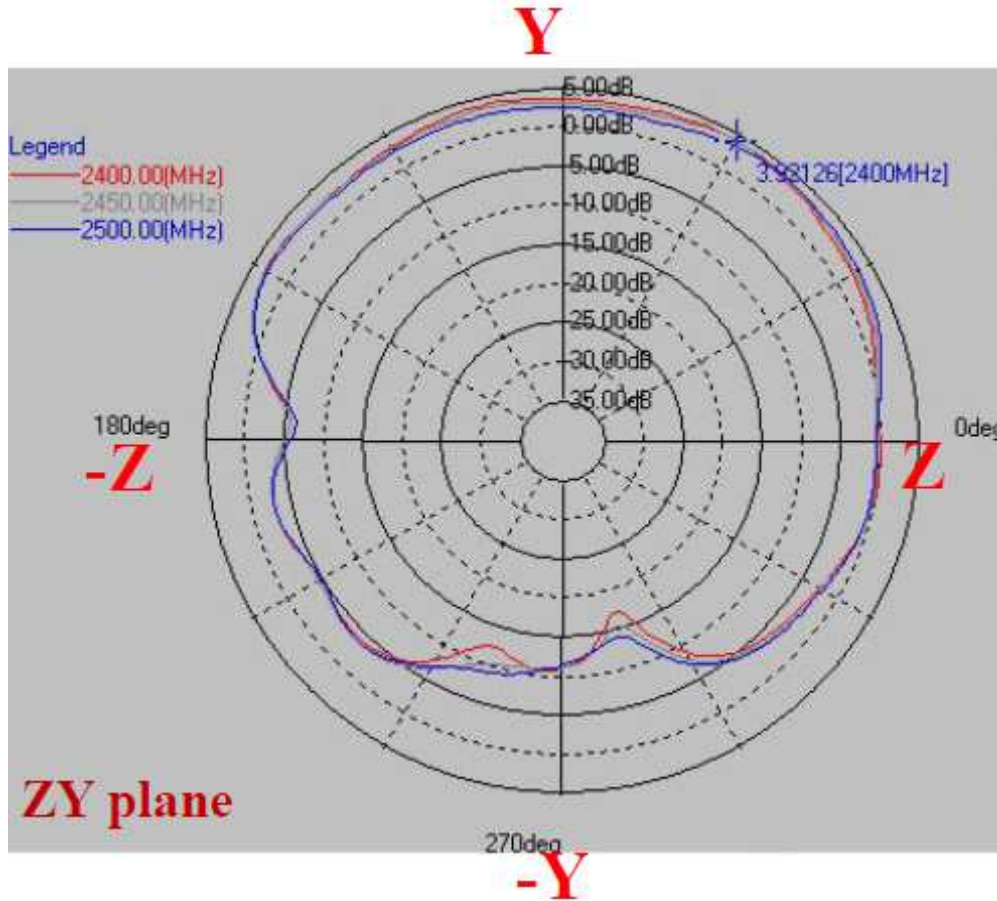
Gain . dB



	ZX plane	
Frequency [MHz]	Max Value [dB]	Average [dB]
2400	0.02	-4.00
2450	-0.39	-4.02
2500	-0.42	-4.02

Phi=90.00deg

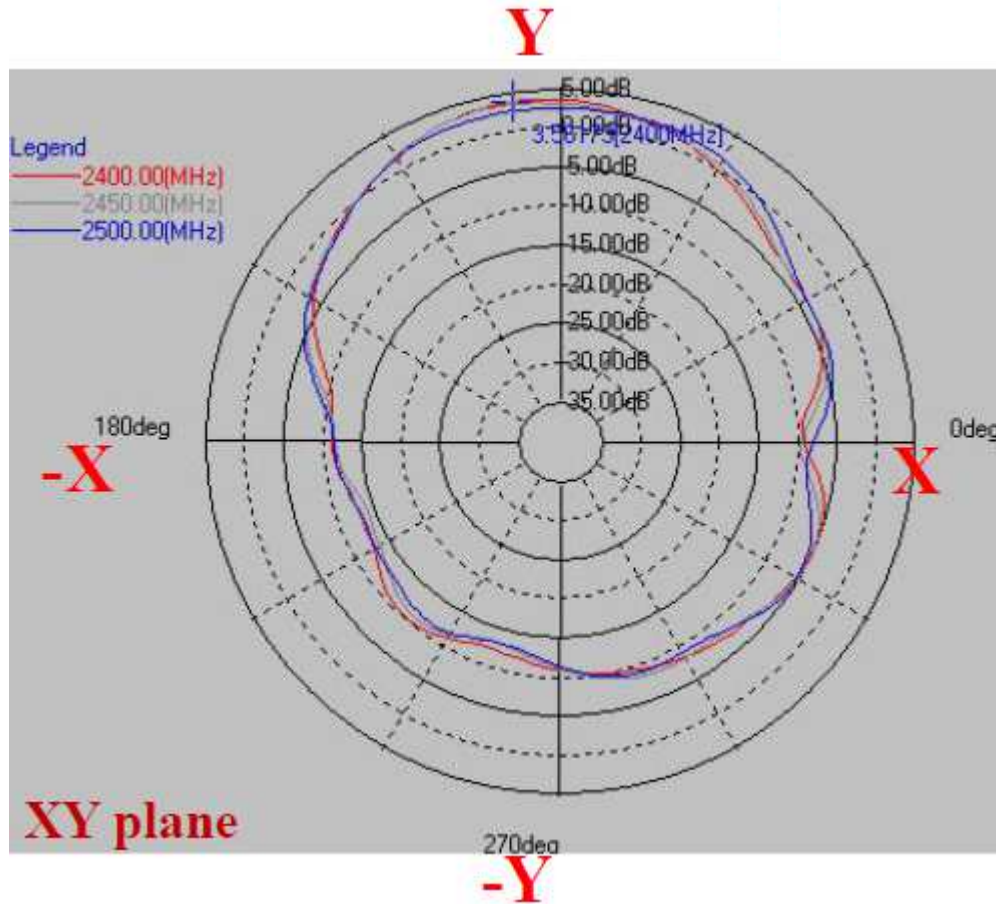
Gain . dB



	ZY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]
2400	3.92	0.26
2450	3.96	0.21
2500	3.55	-0.04

Theta=90.00deg

Gain . dB



	XY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]
2400	3.56	-2.85
2450	3.23	-2.92
2500	2.28	-2.97