



# 品名：RFPCA470909IMAB301

## 1. Explanation of part number :

RF	PCA	4709	09	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
RF Device	PCB Antenna	Per 2 digits of length, width e.g.: 3205 Length 32mm, Width 5mm	2 digits for cable length e.g.: 08 Length 8cm	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>B: Reverse Male</b> F: Female M: Male N: None	<b>0: 0GHz</b> <b>3: 3GHz</b> <b>5: 5GHz</b> <b>6: 6GHz</b> A: 2.4GHz ISM band B: GSM 900/1800 dual band G: GPS band L: 2.4/5.2/5.8 GHz tri-band R:902~928 MHz <b>N: NFC</b> <b>T: LTE band</b> W: WCDMA band	B: MP <b>T:During Test</b> X: Pile Run	0:None 1:∅ 0.81 2:∅ 1.32 3:∅ 1.13 4:Low Loss ∅ 1.13 5:∅ 0.5 6:RG316 7: ∅ 1.37 8:RG178 <b>9:Low Loss</b> ∅ 1.37	01~99 series number

## 2. Electrical Specification :

Item	Specification
Working Frequency Range	2.4~2.5 GHz
Return Loss	-10 dB(Max)
VSWR	2 max.
Gain	4.1 dBi
Impedance	50 Ohm Nominal
Radiation	Omni-directional
Polarization	Linear Vertical
Operation Temperature	-20° C~+65° C

UNLESS OTHER SPECIFIED TOLERANCES ON :  
 X=N/A      X.X=N/A      X.XX=N/A  
 ANGLES=N/A      HOLEDIA=N/A



**INPAQ TECHNOLOGY CO., LTD.**

SCALE : N/A

UNIT : mm

DRAWN BY : 李欣樺

CHECKED BY : 詹惠雯

DESIGNED BY : 黃瑞郎

APPROVED BY : 陳振榮

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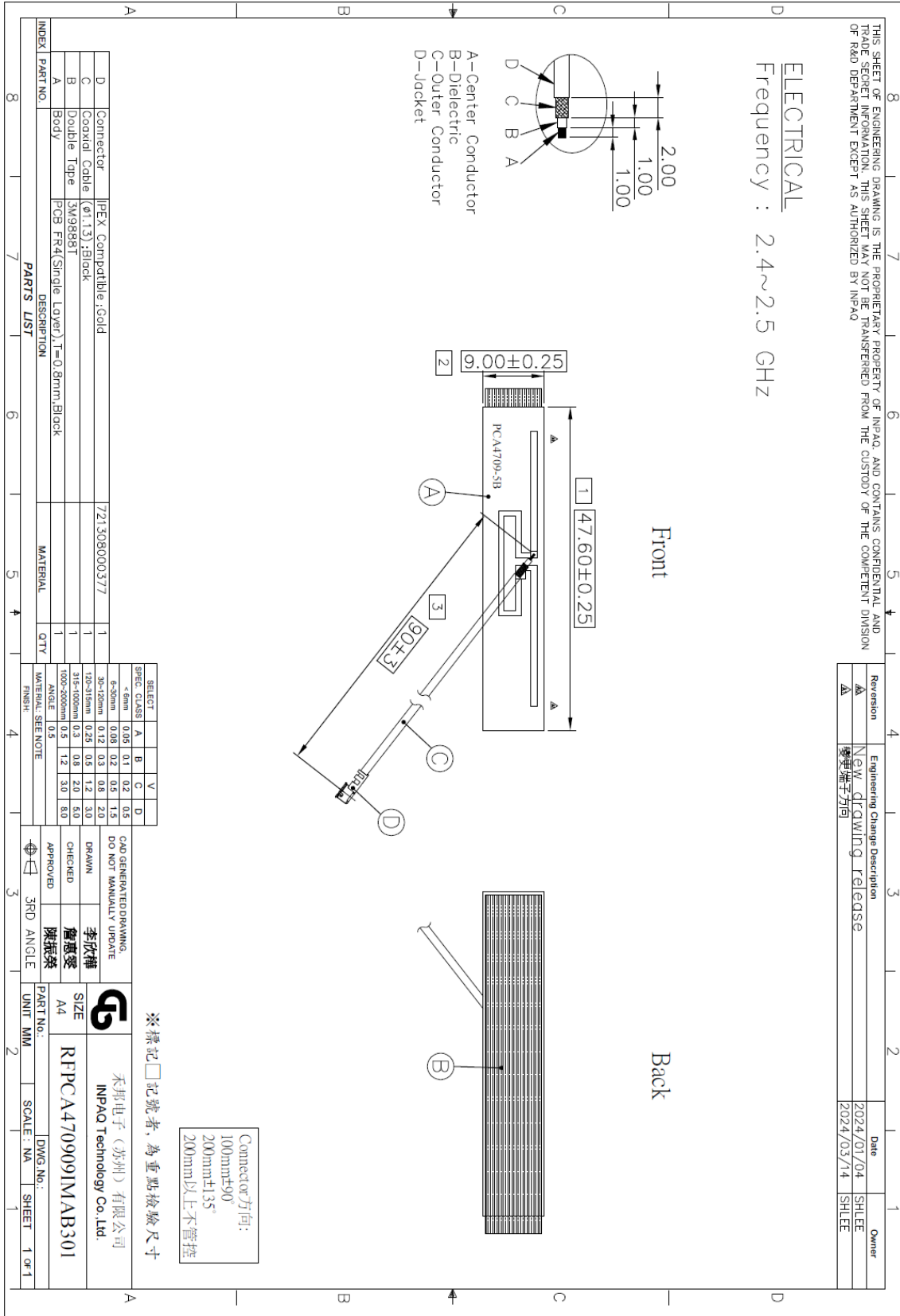
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**A1**

### 3. Antenna Drawing :



UNLESS OTHER SPECIFIED TOLERANCES ON :  
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ANGLES=N/A      HOLEDIA=N/A



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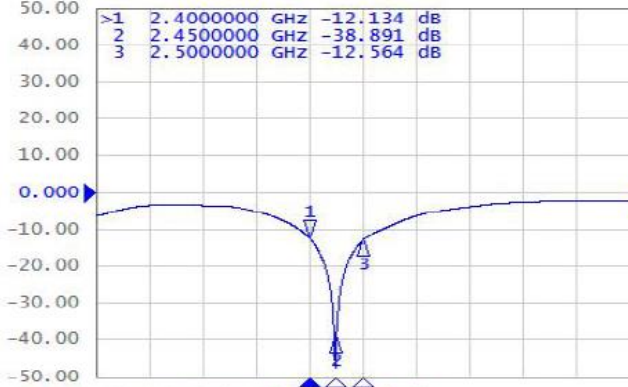
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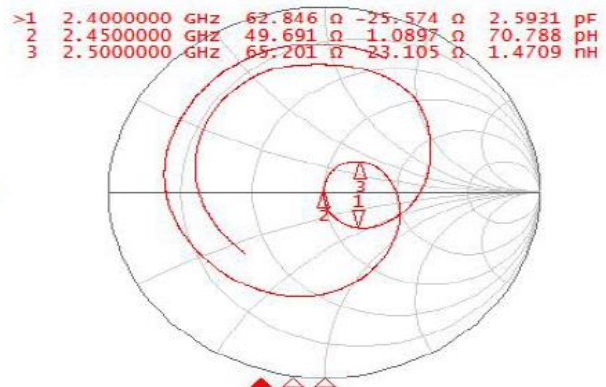
# ELECTRICAL CHARACTERISTICS

## S-Parameter

Tr1 S11 Log Mag 10.00 dB/ Ref 0.000 dB [F1]




Tr2 S11 Smith (R+jX) scale 1.000 U [F1]

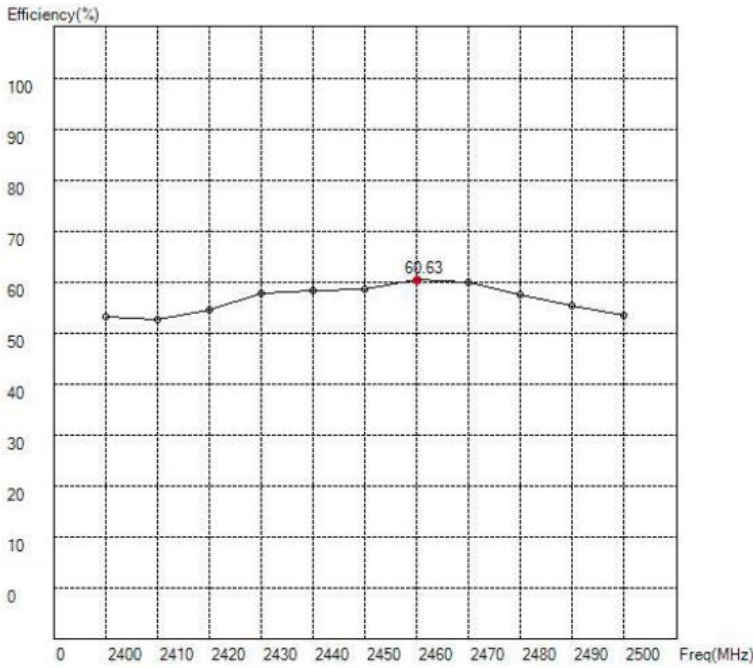


Tr3 S11 SwR 1.000 / Ref 1.000 [F1]

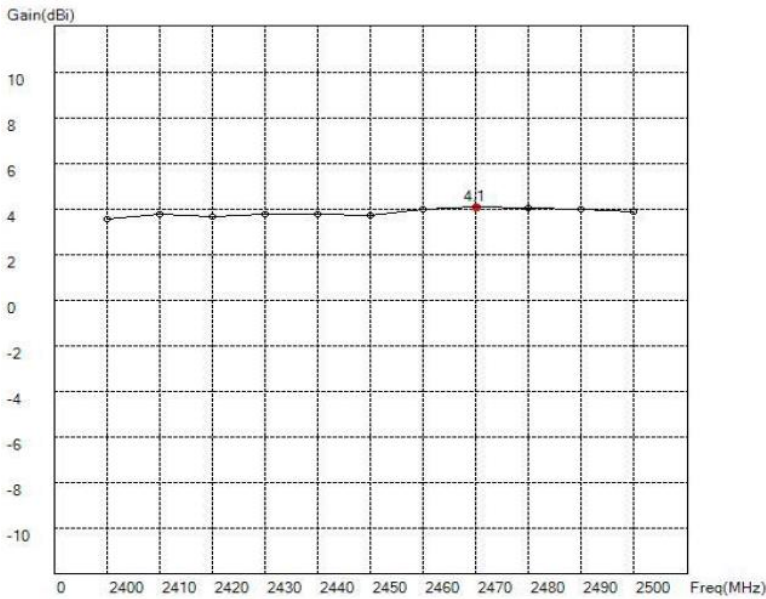


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## Efficiency & Peak Gain



Maximum Efficiency at 2460MHz : 60.63 %



Maximum Peak Gain at 2470MHz : 4.1dBi

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 ANGLES=N/A      HOLEDIA=N/A



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

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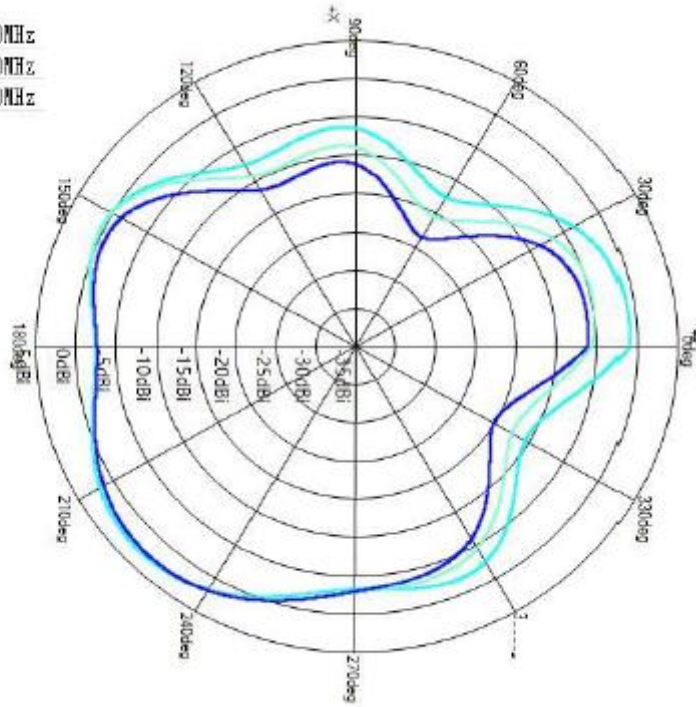
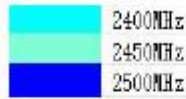
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# Radiation Patterns

X-Z Plane

Phi=0.00deg

Gain . dB

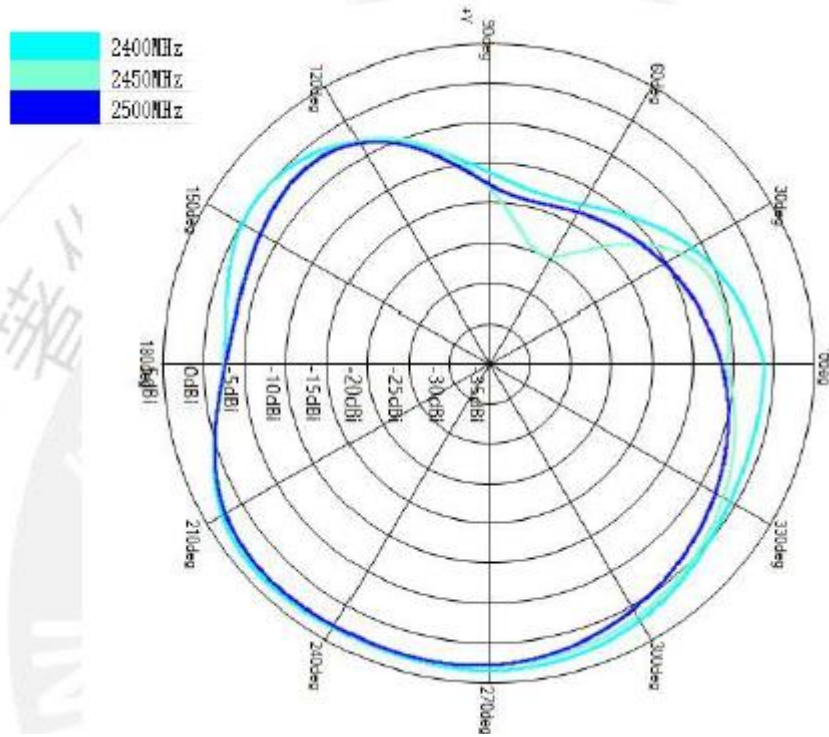



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Y-Z Plane

Phi=90.00deg

Gain . dB

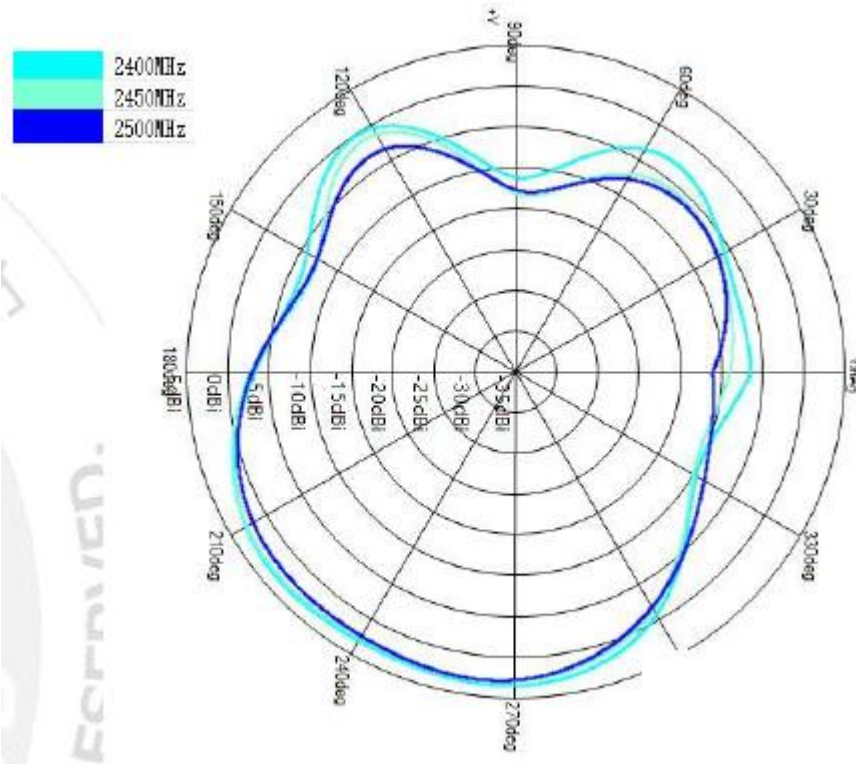


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X-Y Plane

Theta=90.00deg

Gain . dB



Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
2400	1.84	-2.17	3.37	0.01	3.37	-0.91
2450	1.64	-3.53	3.01	-0.89	2.84	-1.49
2500	1.79	-3.93	2.83	-1.24	2.73	-1.99

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