# imall

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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

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## Metal Stamping Antenna 2.4 ~ 2.5 GHz Working Frequency P/N: RFMTA271200NNAB001

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



Version	Date	Description	Author
V01	2015 Aug.	New Release	HWCHAN



## Antenna Specification

### **ELECTRICAL CHARACTERISTICS**

Item	Specification
Working Frequency Range	2.4 ~2.5 GHz
Return Loss	-10dB(Max)
VSWR	2 max.
Peak Gain	3.38 dBi
Polarization	Linear Vertical
Radiation Pattern	Directional
Impedance	50Ω

\*Note 1. Central Frequency should be defined after customers' application approval.

#### MATERIAL TABLE

Items	Description	
Antenna Material	SUS430 鍍鎳 T=0.4mm	

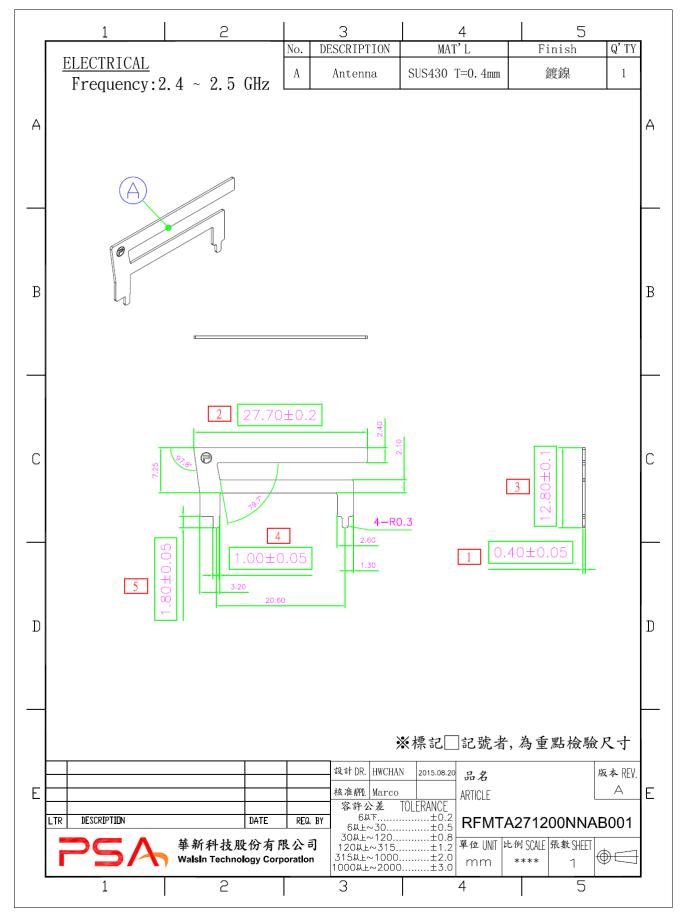
#### ORDERING RULE

RF	МТА	2712	00	Ν	Ν	Α	В	0	01
Type Code	Product Code	Metal Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
Walsin RF Device	MTA: Metal Antenna	e.g.: 2712 Length	2 digits for cable length e.g.: 00 None Cable	E: IPEX IV F: IPEX A13 H: Hirose I: IPEX M: MMCX S: SMA	A: Reverse Female B: Reverse Male F: Female M: Male N: None	0: 0GHz 3: 3GHz 5: 5 GHz 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	Test	0:None 1:00.81 3:01.13 6:RG316 7:01.37 8:RG178	01~99 series number

#### **Approval sheet**



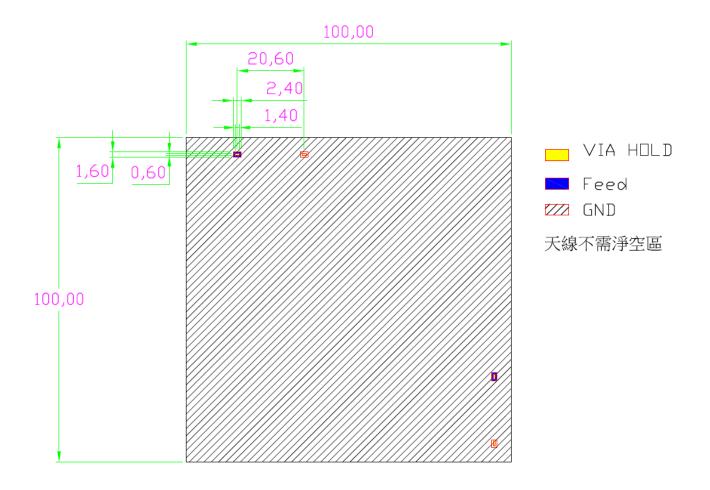
## DIMENSIONS





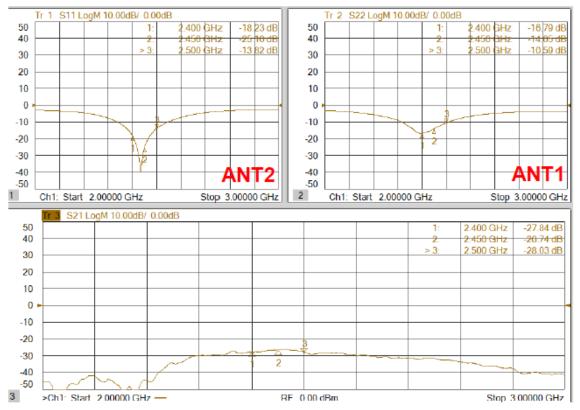
## **Test Report**

## PCB Layout



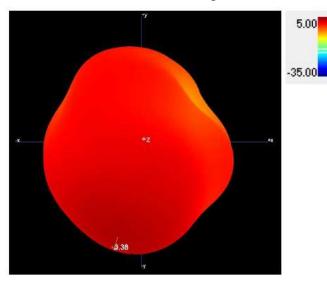
## ELECTRICAL CHARACTERISTICS

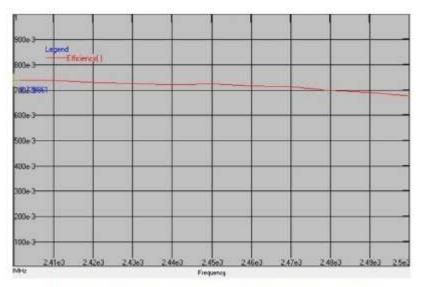
#### **Return Loss**



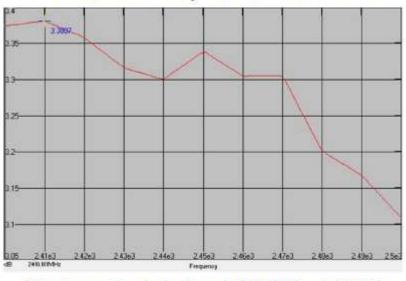


## Antenna Efficiency and Peak Gain





Maximum Efficiency at 2400 MHz : 73.9%



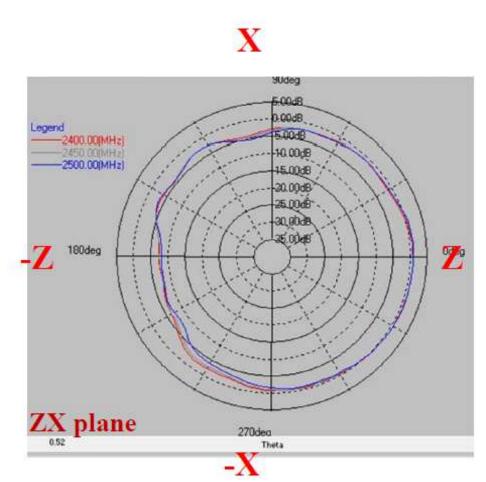
Maximum Peak Gain at 2410 MHz : 3.38dBi



### RADIATION PATTERN 2400~2500 MHz

### X-Z Plane

## Phi=0.00deg



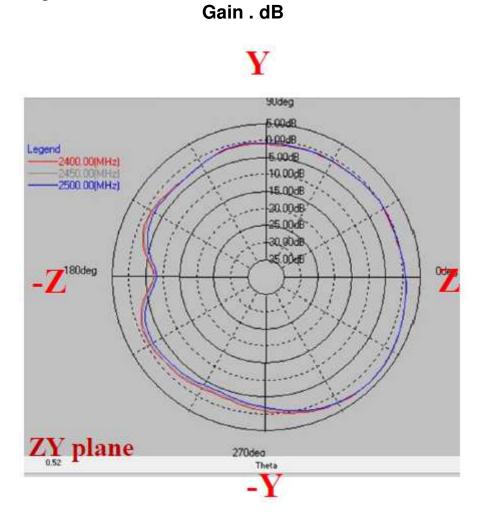
	ZX plane		
Frequency [MHz]	Max Value [dB]	Average [dB]	
2400	0.91	-1.93	
2450	0.83	-2.00	
2500	0.99	-2.18	

Gain . dB



### Y-Z Plane

## Phi=90.00deg



	ZY plane		
Frequency [MHz]	Max Value [dB]	Average [dB]	
2400	3.20	-0.43	
2450	3.22	-0.52	
2500	3.06	-0.72	



### X-Y Plane

## Theta=90.00deg

Y SUdeg Bb00 10008 Legend \_\_\_\_\_2400.00(MHz) 5.00dB 10.00dB 2500.00(MHz) 15.00dB 20.00dB 25.00dB 30,9038 35.0048 180deg 0de XY plane 270dea PN Y

Gain . dB

	XY plane		
Frequency [MHz]	Max Value [dB]	Average [dB]	
2400	-0.29	-2.30	
2450	-0.50	-2.45	
2500	-0.76	-2.78	