



Shenzhen xingtong wireless technology co.,
Telephone: +86-755- 27850514 Fax: +86- 0755-27850514
Address: 3/F, Building A1, Qiangrongdong Industrial Zone,
Jiuwei, Xixiang, Baoan District, Shenzhen

Product specification

Product number: X701-WIFI-2.4GHZ

Product name: X701-FPC-WIFI-ANT

Product item number:

Producer	Audit	Date
Huangjiajun	Wu Yanlong	2024-04-25

Customer confirmation:

Customer name: Shenzhen Bonuo Technology Co., Ltd
Approval :
Date :
Notes :

Please accept your signature and seal and return one copy to our company for filing. Thank you for your cooperation!

 Shenzhen Xingtong Wieress Technology Co., Ltd		Date	2024-04-25
		Version	A0
		File number	XT-YF-004
Product model	2.4G-WIFI antenna	Product number	

1.Product Constrution:

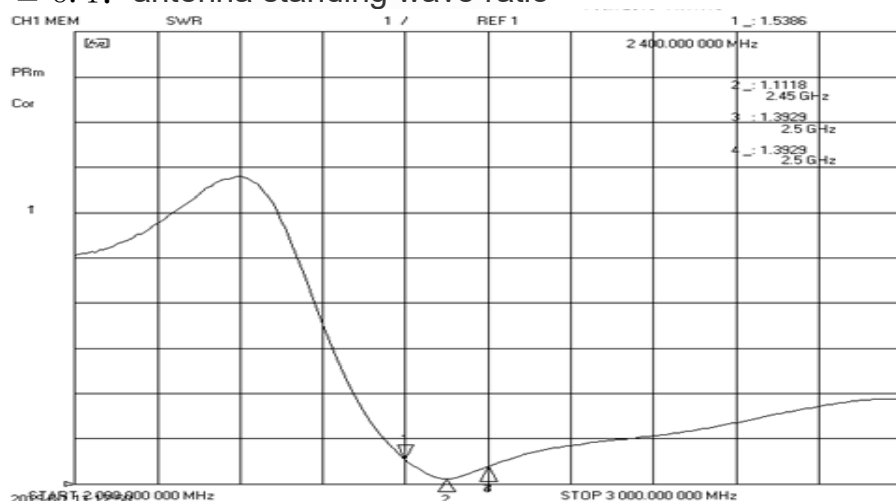
- 1. Antenna material: FPC
- 2. Adhesive tvne: 3M9471
- 3. Antenna size: 21*10 (Tolerance+0.2)
- 4. Coaxial line size: Standard 1.13 coaxial 120mm (line length/tolerance ± 1.0 MM can be customized according to specifications)

2. parameters

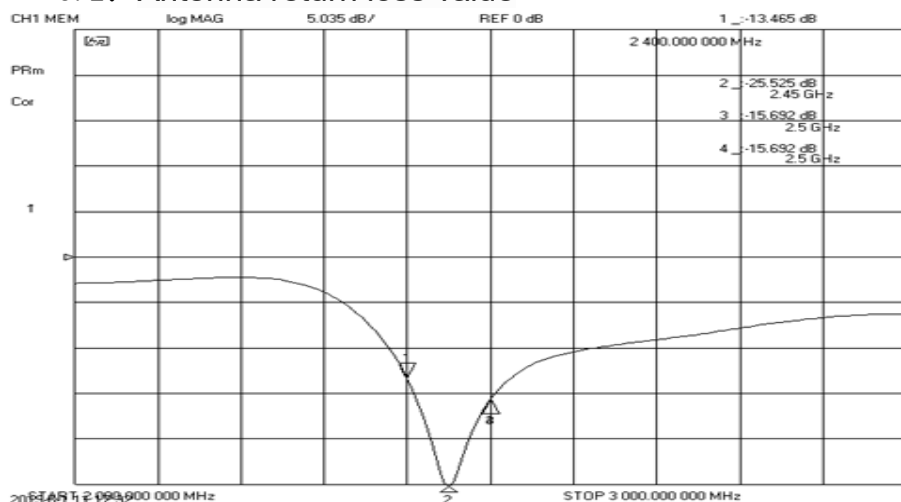
- Scope of use: customer-supplied machines
- Antenna frequencv: 2.4-2.5Ghz
- Antenna free space gain: $2.4 \geq 2.0$ dbi
- Installation mode: terminal wire is welded to motherboard OUT
- Packing method: use PE bag+packing box

3.S11 value of antenna (S11)

- 3.1: antenna standing wave ratio



- 3.2: Antenna return loss value



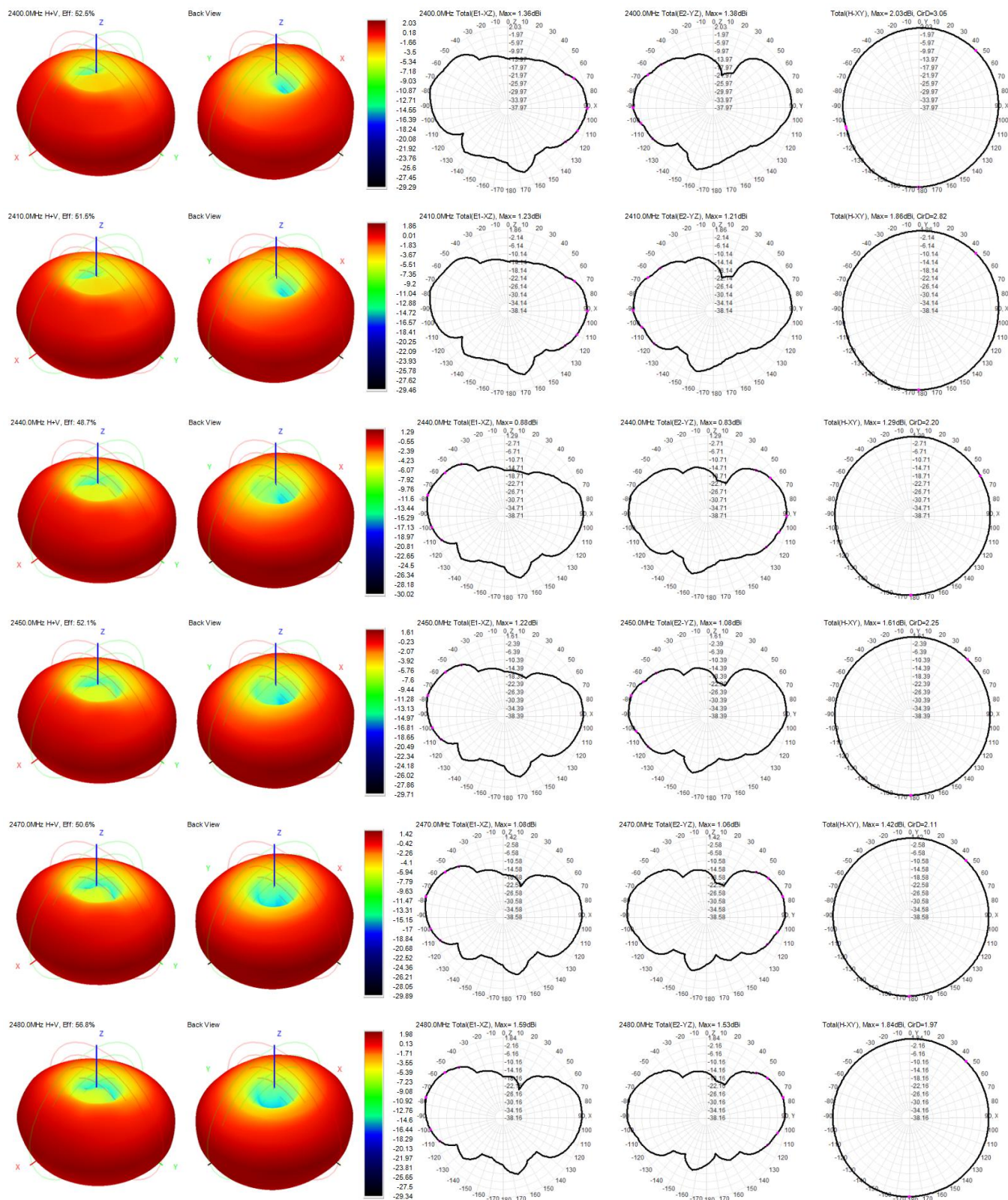
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4. Antenna performance (OTA)

- 4.1: Antenna matching recommendations
Vector impedance modulation can be performed.
- 4.2: Antenna OTA/ efficiency/gain (test instruments: network analyzer, oscilloscope, customer engineering prototype, various standard cards, etc.)

FETUKEJI											
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Point Values											
Ant. Port Input Pwr. (dBm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot. Rad. Pwr. (dBm)	-3.79	-3.55	-3.09	-3.02	-2.89	-2.81	-2.90	-3.03	-3.05	-3.13	-3.22
Peak EIRP (dBm)	-0.82	-1.52	-0.94	-0.74	0.45	-1.04	-0.62	-1.41	-0.75	-0.66	-0.52
Directivity (dBi)	1.32	1.52	1.74	1.84	2.15	2.14	2.12	1.81	1.75	1.66	1.52
Efficiency (dB)	-3.79	-3.55	-3.09	-3.02	-2.89	-2.81	-2.90	-3.03	-3.05	-3.13	-3.22
Efficiency (%)	41.80	44.20	49.10	49.90	51.36	52.39	51.23	49.80	49.51	48.69	47.68
Gain (dBi)	1.32	1.52	1.74	1.84	2.15	2.14	2.12	1.81	1.75	1.66	1.52
NHPRP ±Pi/4 (dBm)	-7.48	-8.33	-7.74	-7.44	-6.15	-7.43	-6.69	-7.23	-6.32	-5.98	-5.71
NHPRP ±Pi/6 (dBm)	-9.44	-10.27	-9.66	-9.36	-8.06	-9.34	-8.59	-9.13	-8.21	-7.85	-7.58
NHPRP ±Pi/8 (dBm)	-13.10	-13.87	-13.20	-12.86	-11.55	-12.82	-12.06	-12.57	-11.62	-11.22	-10.91
Upper Hem. PRP (dBm)	-6.87	-7.72	-7.13	-6.61	-5.54	-6.76	-6.09	-6.77	-5.98	-5.68	-5.30
Lower Hem. PRP (dBm)	-6.73	-7.62	-7.06	-6.56	-5.51	-6.78	-6.12	-6.82	-6.10	-5.88	-5.57
Upper Hem. PRP (%)	-6.18										-16.45
Lower Hem. PRP (%)	-5.32										-15.37

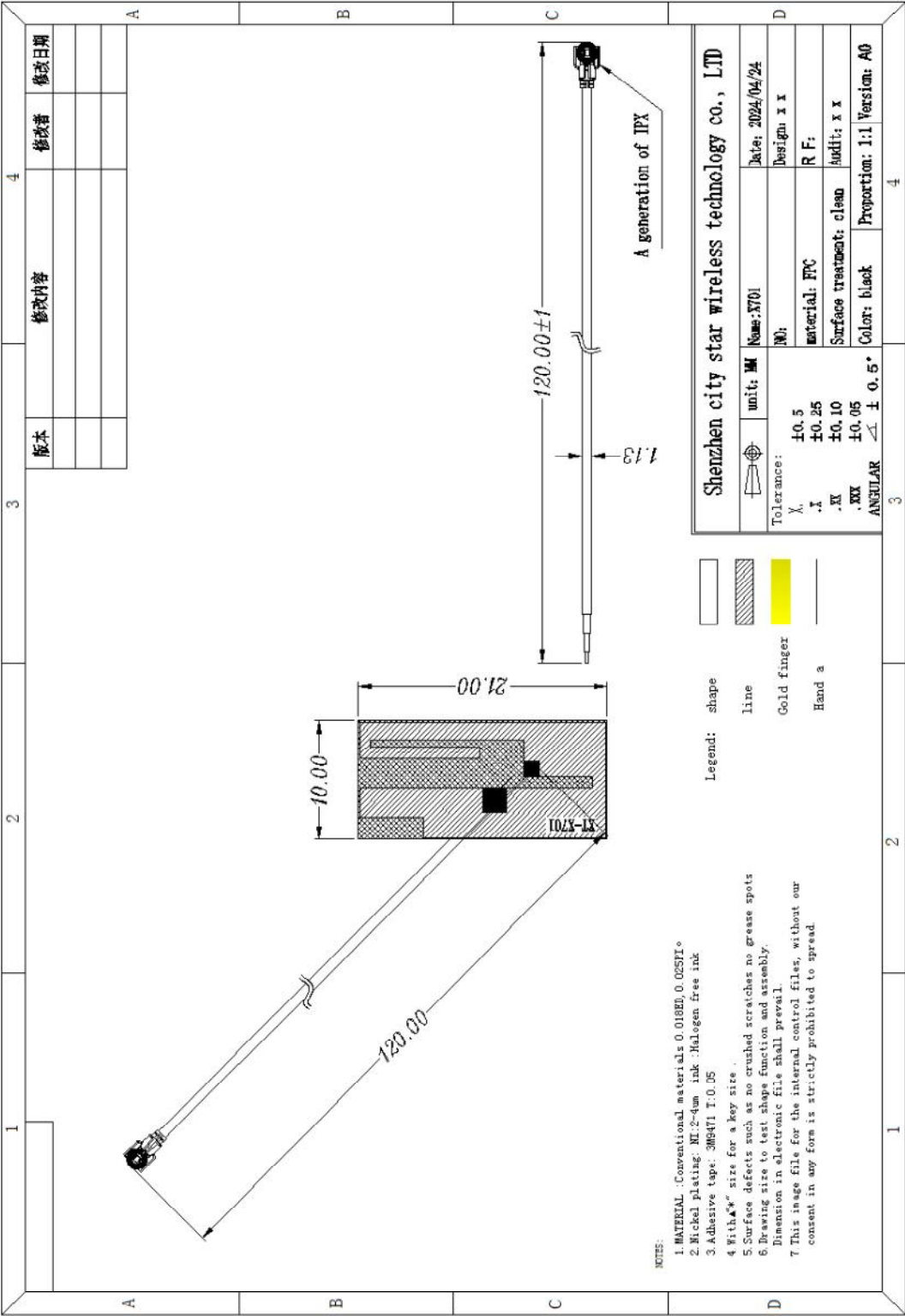
4.3: Antenna OTA-2.4G directional pattern



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5. 附图:

5.1: Finished antenna drawing



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7. Reliability test:

Serialnumber	test item	Test requirements	testing tool	test result
1	Resistance to tin melting	288℃, 10S, no delamination, no foaming	Tin furnace	Ok
2	weldability	245℃, 5s, smooth tin surface, solder surface积≥95%	Tin furnace	Ok
3	Pulling force	N/A	tautness meter	Ok
4	Reverse pulling force	N/A	tautness meter	Ok
5	Peel strength (covering film)	≥0.35kg/cm	peel strength	Ok
6	Peel strength (copper foil)	≥0.8kg/cm	peel strength	Ok
7	Hot melt adhesive	0.1~0.15	/	Ok

8. Matters needing attention:

After opening, please carefully check whether the goods are complete. If there is any damage, please contact us immediately.



东莞市亚富智能科技有限公司

DongGuan YaFai Intelligent Technology Co.,ltd

承 认 书

APPROVAL SHEET

物 料 名 称

Product Name: PKE Bare antenna

物 料 描 素

Specification: AP2.5x8x50mm/HD-Mn,345uH $\pm$ 5% @125KHz/1V, Fala472J630V P=7.5 capacitance

物 料 编 号

Part N.O: LF50M351J-125K-NF

客 户 名 称

Customer Name: 祥行xiangxing

版 本

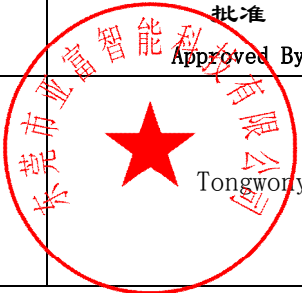
Version : VR0

日 期

Date : 2024-08-16

供 应 商 确 认

APPROVED BY VENDOR

制作 Prepared By	审核 Checked By	批准 Approved By
Yang	Tongwony	 Tongwony

客 户 确 认

APPROVED BY CUSTOMER

确认 Approved By	审核 Checked By	批准 Approved By

Tel: 86-0769-8225 8010 Fax: 86-0769-8225 8020

E-mail: sales@myx555.com Web Site: www.myx555.com

Add: 东莞市虎门镇大宁社区大板路 66 号万亨科技园 A 栋三楼 B 区Zone B, 3rd Floor, Building A, Wanheng Science Park, No. 66, Daban Road, Daning Community, Humen Town, Dongguan City



东莞市亚富智能科技有限公司

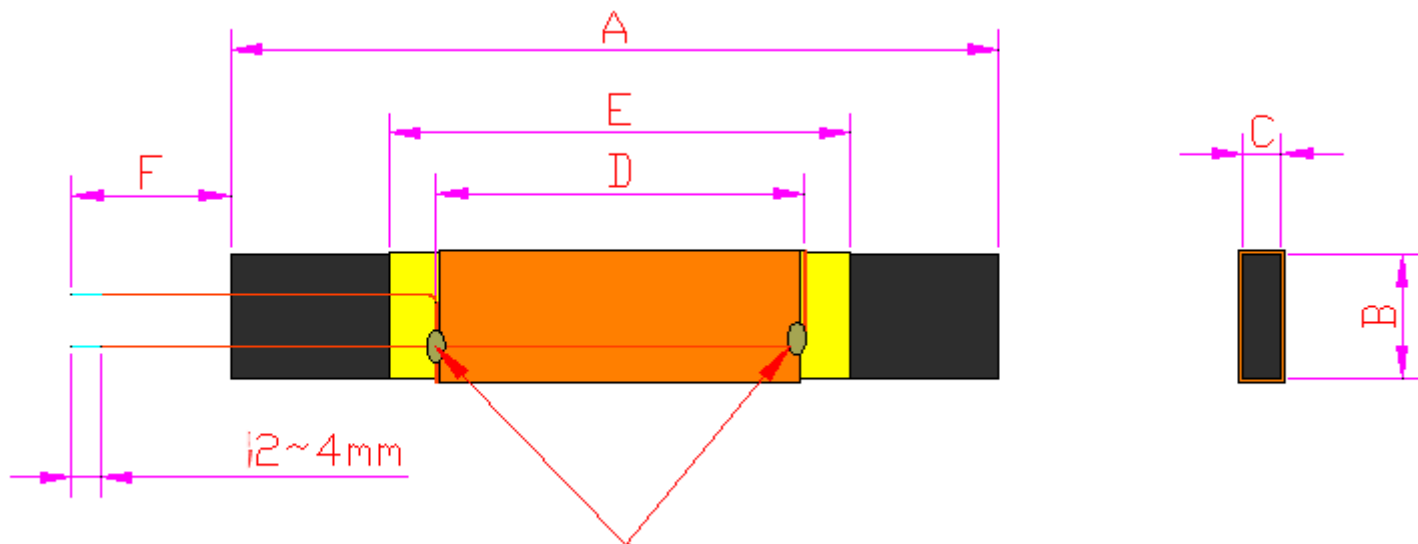
DongGuan YaFai Intelligent Technology Co.,ltd

Change the resume

VR0	Initial offering	Yang Xinghai	2024-08-16

一、产品外形尺寸 Dimension(mm):

antenna gain:0dBi

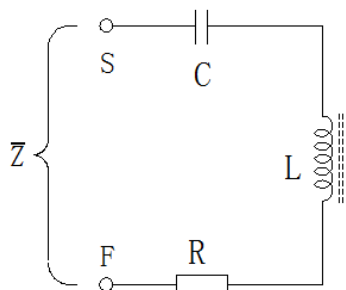


A	B	C	D	E	F	
50+0.3/-0.7	8±0.3	2.5±0.2	32±2	2~4	50±5	mm

二、主要材料 Main Material:

Item	Material	Description	Remark
1	Ferrite Core	AP2.5x8x50mm/HD-Mn	
2	Copper Wire	Φ0.25mm/2UE-N 155° C	
3	Capacitor	Fala 472J630V P=7.5	

三、等效原理图 Schematic:



Notes:

1. L :Ferrite Core Coil Inductance 电感;
2. C:Capacitor 电容;
3. R:Copper Resistance 铜线阻抗;
4. Z:Impedance 阻抗



四、电气性能 Electrical Characteristics:

Parameter (参数)	Symbol (符号)	Conditions (测试条件)	Min. (最小值)	Avg. (平均值)	Max. (最大值)	Unit (单位)
Inductance (电感量)	L	125KHz/1V	327.75	345	362.25	uH
Q min Coil (品质因素)	Q	125KHz/1V	150	180		NA
Capacitor (电容量)	C	1KHz/1V	4.465	4.7	4.935	nF
Frequency (频率)	F	NA	122.5	125	127.5	KHz
Impedance (阻抗)	Z	125KHz/1V	0.5	3.5	10.0	Ω

Warm reminder:

(AtTA =25°C) Ambient temperature 25°C test;

Metal will weaken the magnetic field, close to metal will cause inductance and Q value change, please try to stay away from metal.

5. Package:

1. Inner packaging: the bare antenna and the capacitor (the capacitor does not cut the foot) are packaged separately, and the corresponding gear matches the shipment;

2. Outer packing (outer box K=A440*320*150mm)

pending

We statement that All measurements were performed radiated and therefore additional antenna gain documentation is not required.