

Shenzhen Yuhong Industrial Co., LTD

specification

Customer Name	RISOUND ELECTRONICS
Publish Date	2023/2/22
Model Name	BTE-663
Product NO.	E42050184
Product Name	Contact film + Bluetooth antenna FPC
Description	FPC antenna 24.64*13.72*0.10mm black ink back adhesive 3M9471 Silkscreen version HJ BTE-663-L-V3.7

Ex-factory seal

SIGN	APPROVED BY	CHECKED BY	DRAMN
	James	Aston	Cindy

Customer seal

SIGN	QE	R&D	PE

Address: 1308, Block A, Zhantao Technology Building,
intersection of Minzhi Avenue and Gongye West Road, Longhua
New District, Shenzhen

Tel: 0755-21031946

<http://www.yuhong-co.com/>

catalogue

- 一、 resume
- 二、 Product drawing
- 三、 Specification of electrical and
mechanical properties

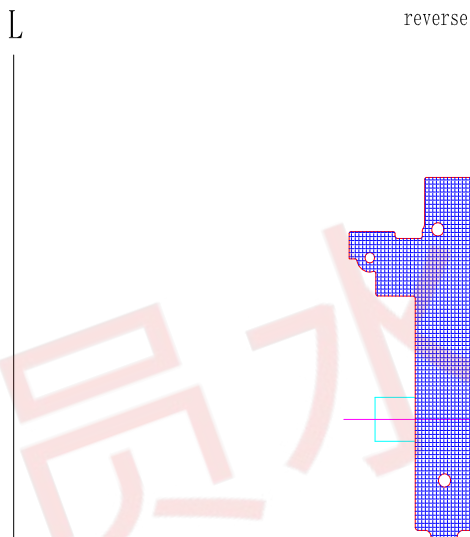
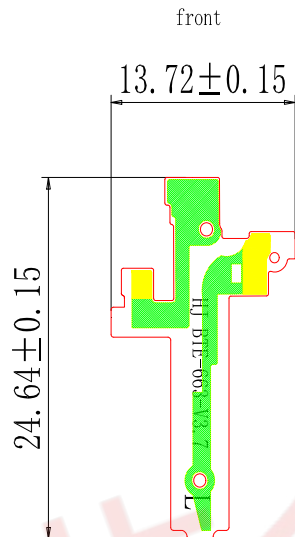
非会员水印

一、Prepare/revise the resume

version	Revision page	Change time	Change of person	Reason and content of change	remarks
A0	—	2023/2/22	Cindy	First version of the antenna form	
A1					
A2					
A3					
A4					
A5					
A6					

二、Product drawing

Black ink + white glossy font,
Micromucosal technology



NOTES:

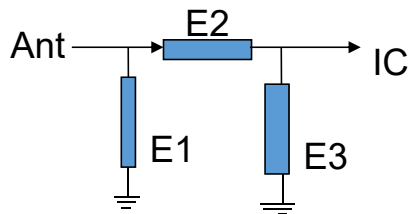
- The green part is made of copper; Blank is the base material; The yellow part is the gold-plated area; Blue is the glue area;
- The knife die can not hurt the line, the gold-plated area should be connected with the line;
- The surface shall not have dirt, scratches, black spots, fracture and fall off after gold plating and other undesirable phenomena;
- Material: FPC single panel [PI(ED) half to a third of the substrate (0.039mm)+ adhesive (3M 9471 0.05mm)+ surface black ink (Youli) (0.01mm);
- The back glue is 3M 9471;
- Gold finger surface gilded (thickness: ≥1.5u"), no oxidation phenomenon (salt spray test required);
After 48±1 hours of salt spray test, there were no corrosion points on the surface and the coating fell off.
- Mark * as the key size, without marked tolerance, please check according to Class B tolerance.
- Meet our ROHS,Reach, halogen-free requirements.

Note: This drawing is issued by Shenzhen Yuhong Industrial Co., LTD
No one shall copy, alter or take it away from the company without permission.

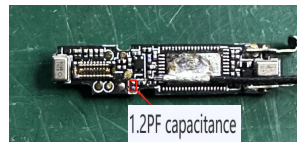
Shenzhen Yuhong Industrial Co., LTD											
One-stop RF solution provider											
RF PA				Machine type	BTE-663-L	Date	2023.02.21				
0~10	±0.10	◎	0.02	Product name	FPC antenna	design	Cindy				
10~20	±0.12	◎	∅0.03	Material number		audit	ME	Cindy			
20~40	±0.15	⊥	0.02	Material quality	Half pair one-third electrolytic copper		RF	James			
40~50	±0.20	▱	0.04	Surface treatment		confirm	Tony				
		∠	0.02	Appearance treatment		unit	mm	proportion	FIT	version	V3.7
位置											
5				6		7			8		

三、 Specification of electrical and mechanical properties

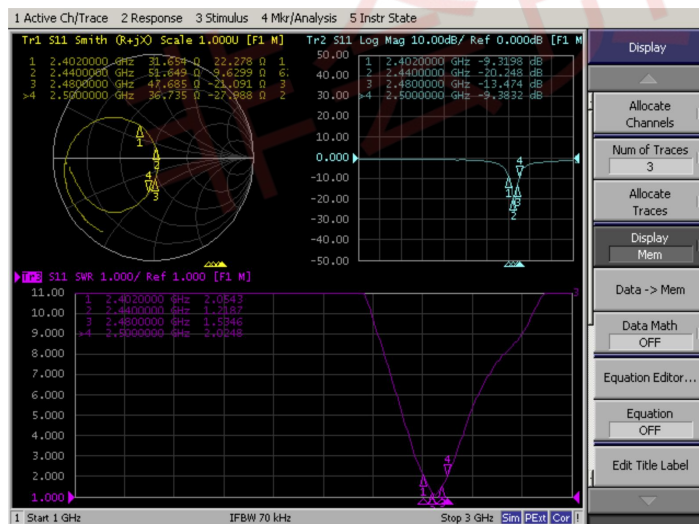
1、 Match the circuit diagram



Element	Value
E1	1.2PF
E2	OR
E3	N/A

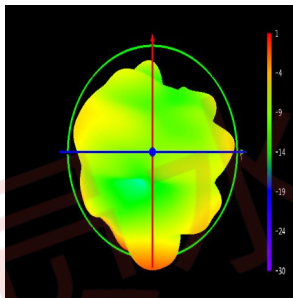
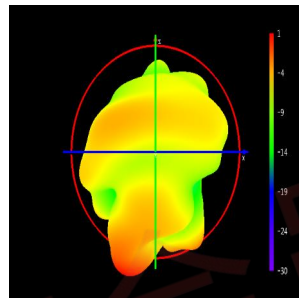
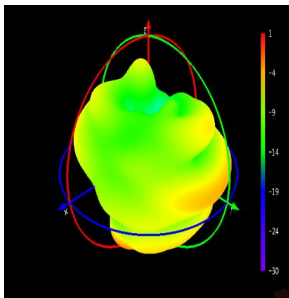


2、 S11 parameter

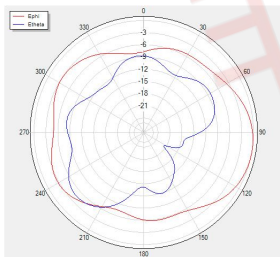


3、Passive efficiency

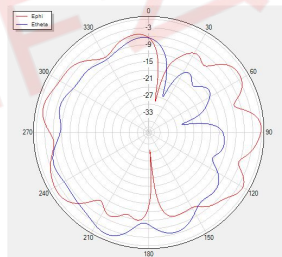
Freq[MHz]	Gain(dBi)	Efficiency(%)	Gain(dBi)	Efficiency(%)
	Free space	Free space	Second generation	Second generation
2400	-1.59	16.19	-5.37	7.12
2410	-2.69	16.95	-5.21	7.31
2420	-2.3	17.52	-5.14	7.46
2430	-2.05	17.88	-5.15	7.52
2440	-2.01	17.97	-5.27	7.47
2450	-2.05	18.16	-5.35	7.47
2460	-2.12	18.3	-5.44	7.46
2470	-2.22	18.22	-5.56	7.38
2480	-2.32	17.94	-5.73	7.25
2490	-2.34	17.8	-5.85	7.19
2500	-2.46	16.88	-6.16	6.83



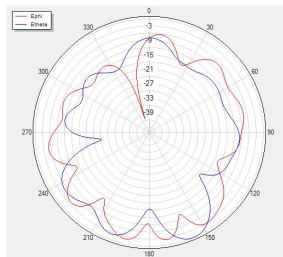
Theta=90 freq=2450MHz



Phi=90 freq=2450MHz



Phi=0 freq=2450MHz



4、 Active OTA data

L	channel	TRP (dbm)	TRP (dBm)
Free space	0	4.21	-84.71
	39	4.62	-85.12
	78	3.87	-85.53
L	channel	TRP (dbm)	TIS (dbm)
Second generation head die	0	1.77	-83.34
	39	2.01	-83.42
	78	1.63	-83.52

非会员水印

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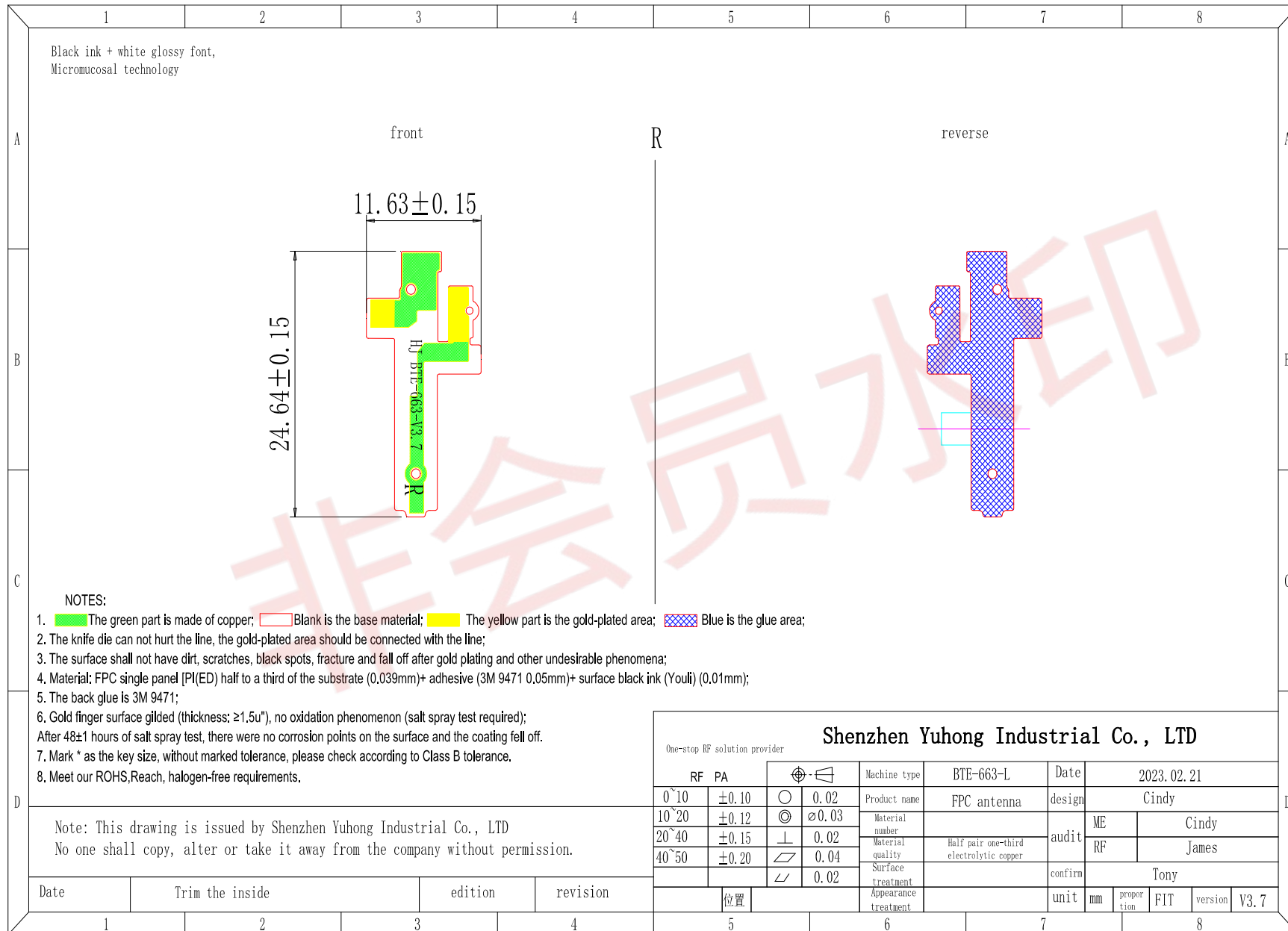
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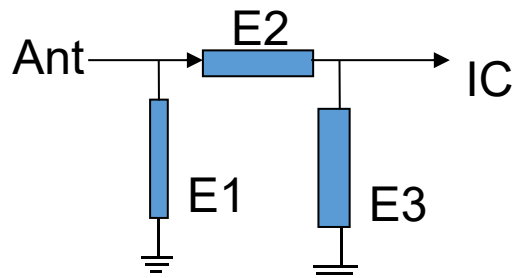
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三、 Specification of electrical and mechanical properties

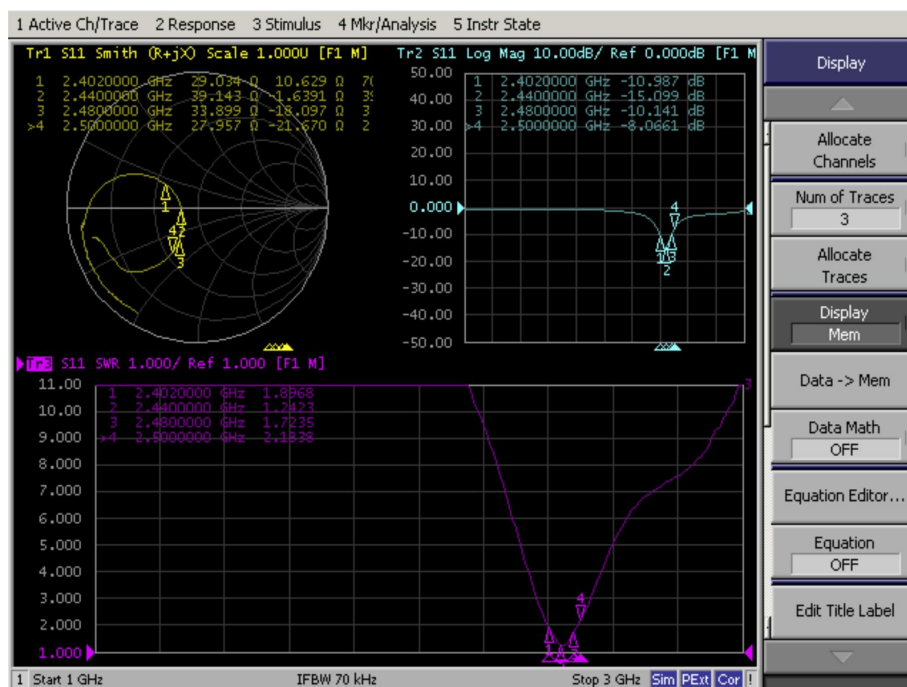
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Element	Value
E1	N/A
E2	OR
E3	N/A

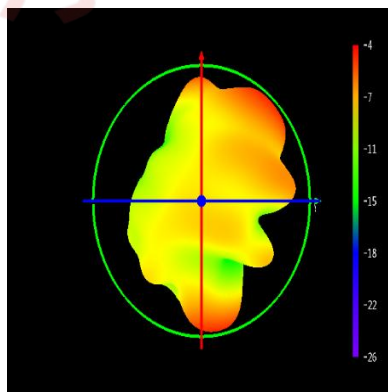
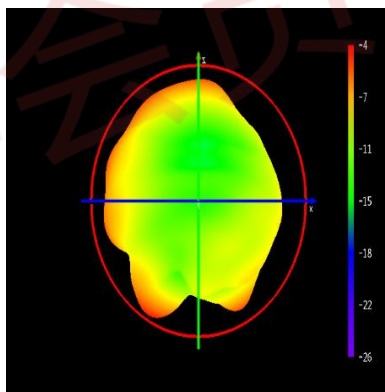
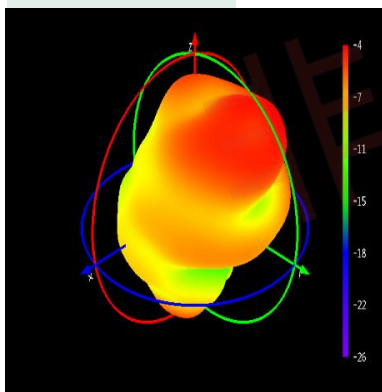


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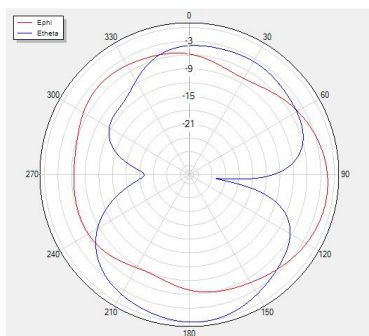


3、Passive efficiency

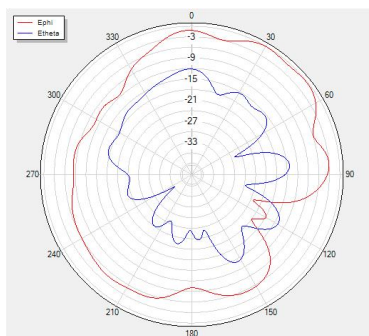
Freq[MHz]	Gain(dBi)	Efficiency(%)	Gain(dBi)	Efficiency(%)
	自由空间	自由空间	二代人头	二代人头
2400	-1.72	10.38	-4.34	9.32
2410	-1.58	11.15	-4.26	9.43
2420	-1.24	11.78	-4.18	9.37
2430	-1.51	12.42	-4.1	9.22
2440	-1.93	12.98	-4.08	8.97
2450	-1.85	13.64	-4.03	8.82
2460	-1.87	14.31	-3.96	8.74
2470	-1.01	14.95	-3.9	8.69
2480	-1.21	15.54	-3.9	8.62
2490	-1.47	16.06	-3.93	8.48
2500	-1.76	16.28	-4.08	8.19



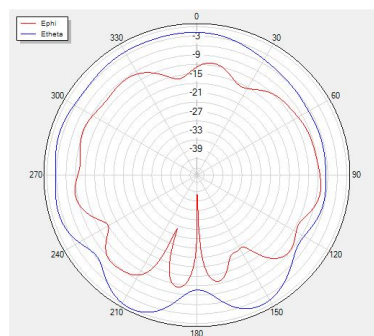
Theta=90 freq=2450MHz



Phi=90 freq=2450MHz



Phi=0 freq=2450MHz



4、Active OTA data

R	channel	TRP (dbm)	TRP (dBm)
Free space	0	3.2	-84.7
	39	4.2	-85.1
	78	3.9	-85.5
R	channel	TRP (dbm)	TIS (dbm)
Second generation head die	0	1.4	-83.3
	39	1.9	-83.1
	78	1.8	-83.5

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