



Shenzhen Yuhong Industrial Co., Ltd

# Part specifications

Customer name:	Dongguan Hele Electronics Co., Ltd
Product Model:	DT10 (Jerry)
Risuntek P/N:	10.157.000107
Version:	A1
Product Name:	FPC antenna
Description:	FPC Antenna HJ DT10_JL-V1.1 Yuhong
Date:	2023/4/20

(Customer Signatures)

(PM)	(ME)	(QE)

(Inner Signatures)

(QE)	(ME)	(RF)

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

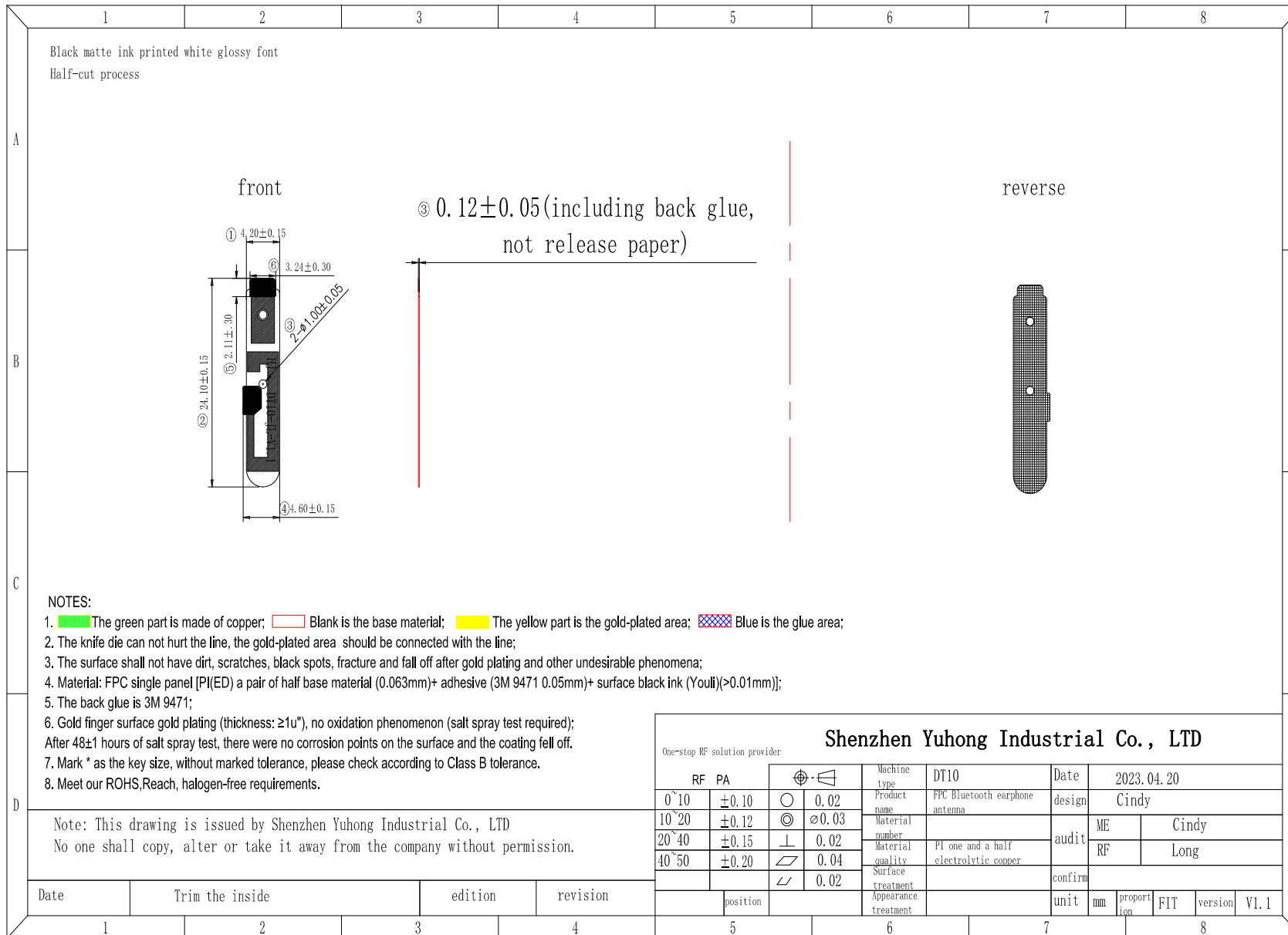
# catalogue

- 一、 Prepare/revise the resume
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and mechanical properties

## 一、Prepare/revise the resume

version	Revision page	Change time	Change of person	Reason and content of change	remarks
A0	—	2022/10/12	Cindy	First version of the antenna form	
A1	—	2022/11/1	Cindy	Increase touch	
A2					
A3					
A4					
A5					
A6					

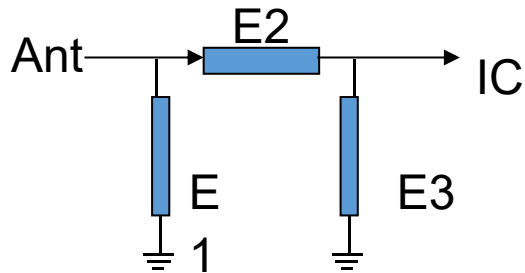
## 二、Product drawing



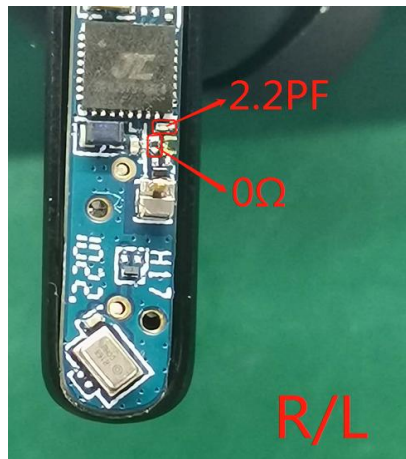
One-stop RF solution provider				<b>Shenzhen Yuhong Industrial Co., LTD</b>			
RF	PA	⊕	⊖	Machine type	DT10	Date	2023.04.20
0°10	±0.10	○	0.02	Product name	FPC Bluetooth earphone antenna	design	Cindy
10°20	±0.12	◎	∅0.03	Material number		audit	ME Cindy
20°40	±0.15	⊥	0.02	Material quality	PI one and a half electrolytic copper	RF	Long
40°50	±0.20	∠	0.04	Surface treatment		confirm	
		∠	0.02	Appearance treatment			
				unit	mm	proportion	FIT version V1.1

### 三、 Specification of electrical and mechanical properties

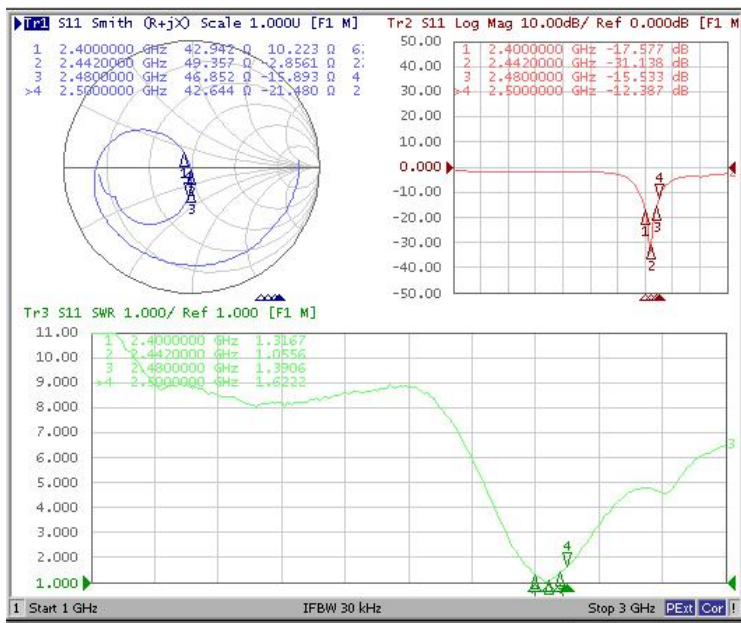
#### 1、 Match the circuit diagram



Element	Value
E1	N/A
E2	0Ω
E3	2.2PF

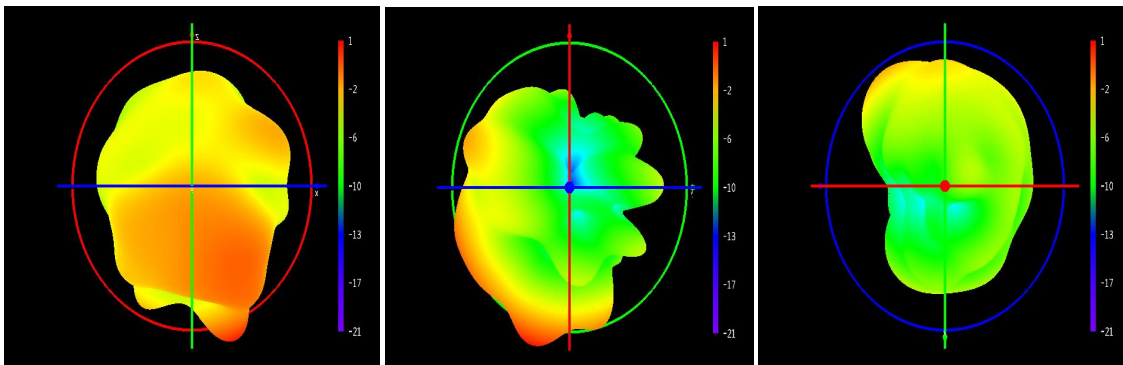


#### 2、 S11 parameters

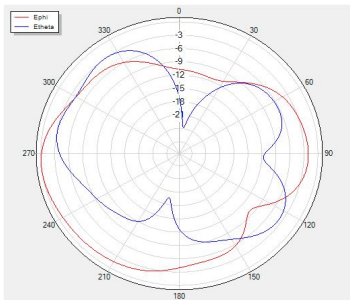


### 3、Passive efficiency

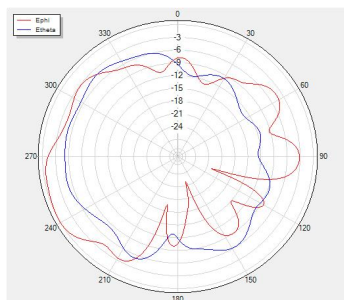
Freq[MHz]	Gain(dBi)	效率值(dB)	Efficiency
	Free space	Free space	Free space
2400	0.54	-5.16	30.48
2410	0.76	-5.08	31.05
2420	0.9	-5.06	31.18
2430	0.99	-5.1	30.87
2440	1.04	-5.18	30.37
2450	1.13	-5.22	30.07
2460	1.2	-5.26	29.78
2470	1.22	-5.34	29.26
2480	1.12	-5.48	28.31
2490	1.06	-5.6	27.55
2500	0.68	-5.94	27.47



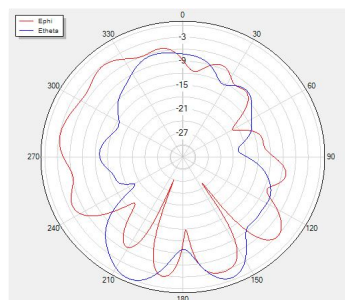
Theta=90 freq=2400MHz



Phi=90 freq=2400MHz



Phi=0 freq=2400MHz



#### 4、 Active OTA data

L	channel	TRP (dbm)	TRP (dBm)
Free space	0	4.7	-88.24
	39	5.05	-89.25
	78	5.24	-90.19
L	channel	TRP (dbm)	TIS (dbm)
Second generation head die	0	-5.87	-79.78
	39	-5.25	-80.63
	78	-4.29	-81.14
R	channel	TRP (dbm)	TRP (dBm)
Free space	0	3.46	-88.37
	39	4.68	-89.07
	78	4.39	-90.29
R	channel	TRP (dbm)	TIS (dbm)
Second generation head die	0	-5.18	-79.41
	39	-5.3	-80.24
	78	-4.6	-81.83

#### 5、 Measured effect

Test cell phone	Samsung S6/ Apple 5S
distance	15M/15M
Test site	Huawei walkway
tester	Long