

Shenzhen Kaipushen Communication Technology Co., Ltd

Sample approve sheet

Customer: Zhouhai intelligence

Item name: T009

Sample name: BT aerial

color: black

Type of antenna: FPC

Gain: -1.92dBi

Release Date: 2023-02-16

Supplier confirmed	Make	R&D	Structure	Quality

Supplier confirmed	Item	Appearance	Structure	Quality

Conclusion	☐ MP use ☐ Limited use () K
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☐ ROHS

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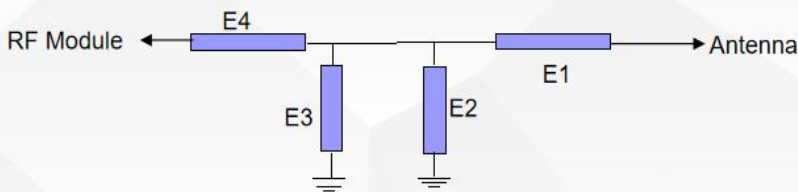
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- 7、 High-low temperature test
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4.1 Aerial function

- 4.1-1 Specif icatin standard
Wifi operating frequency band 2400m-2500m
- 4.1-2 Aerial matching circuit.
BTMatching circuit as follows:

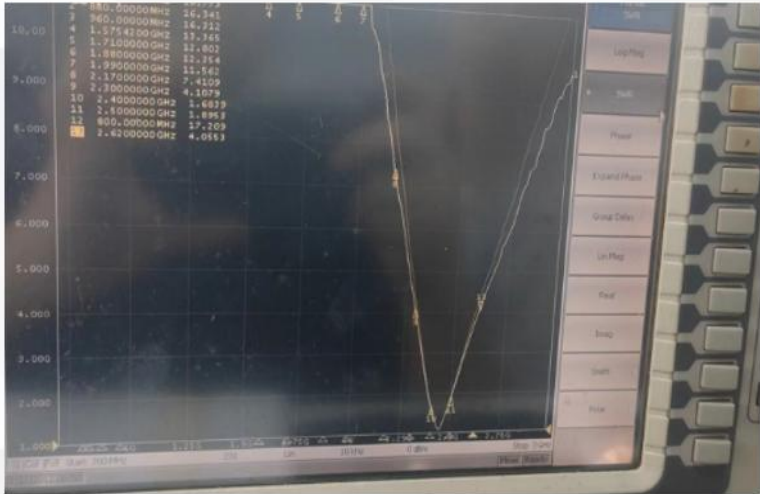
BT antenna matching circuit



Bracelet	Element	Value
	E1(0201)	0R
	E2(0201)	2.2PF
	E3(0201)	NC
	E4(0201)	0R

4.1-3 Passive test results

BT passive standing wave diagram



BT active test data

Free

Channel	TRP(dBm)	TIS(dBm)
0	2.12	-87.6
39	2.75	-88.5
78	3.02	-88.7

hand model

Channel	TRP(dBm)	TIS(dBm)
0	-1.4	-83.4
39	-1.1	-83.7
78	-0.8	-83.9

BT efficiency test data

Free

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	21.3	-6.72	-2.52
2410	21.77	-6.62	-2.47
2420	22.31	-6.52	-2.38
2430	22.9	-6.47	-2.29
2440	24.16	-6.17	-2.16
2450	25.02	-6.02	-2.08
2460	26.22	-5.81	-1.92
2470	24.57	-6.1	-2.12
2480	24.09	-6.18	-2.18
2490	24.04	-6.14	-2.19
2500	24.01	-6.17	-2.19

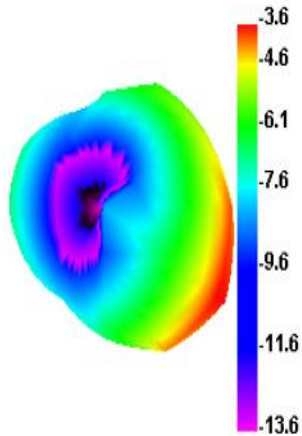
hand model

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	9.88	-10.11	-8.1
2410	9.95	-10.02	-8.31
2420	9.97	-10.02	-8.16
2430	10.05	-9.95	-7.76
2440	10.09	-9.94	-7.58
2450	10.13	-9.91	-7.36
2460	10.15	-9.89	-7.4
2470	9.68	-10.21	-7.09
2480	9.66	-10.22	-6.9
2490	9.52	-10.24	-6.73
2500	9.32	-10.32	-6.77

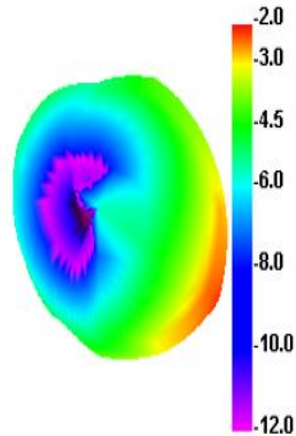
BT 3Dchart

free

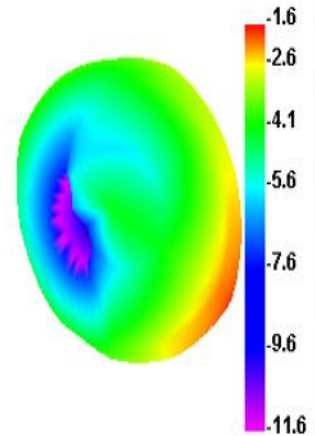
2400.000MHz



2440.000MHz



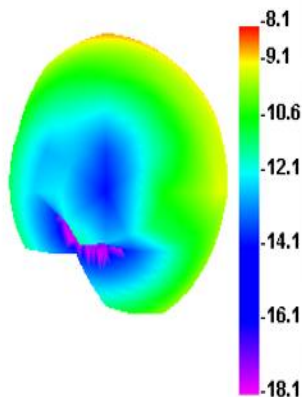
2480.000MHz



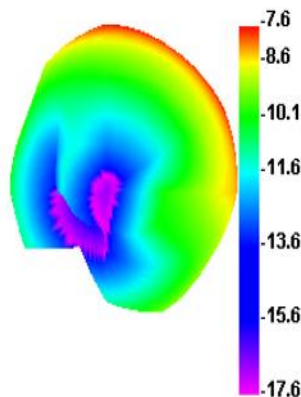
BT 3D chart

hand model

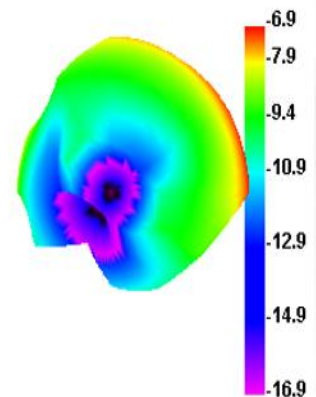
2400.000MHz



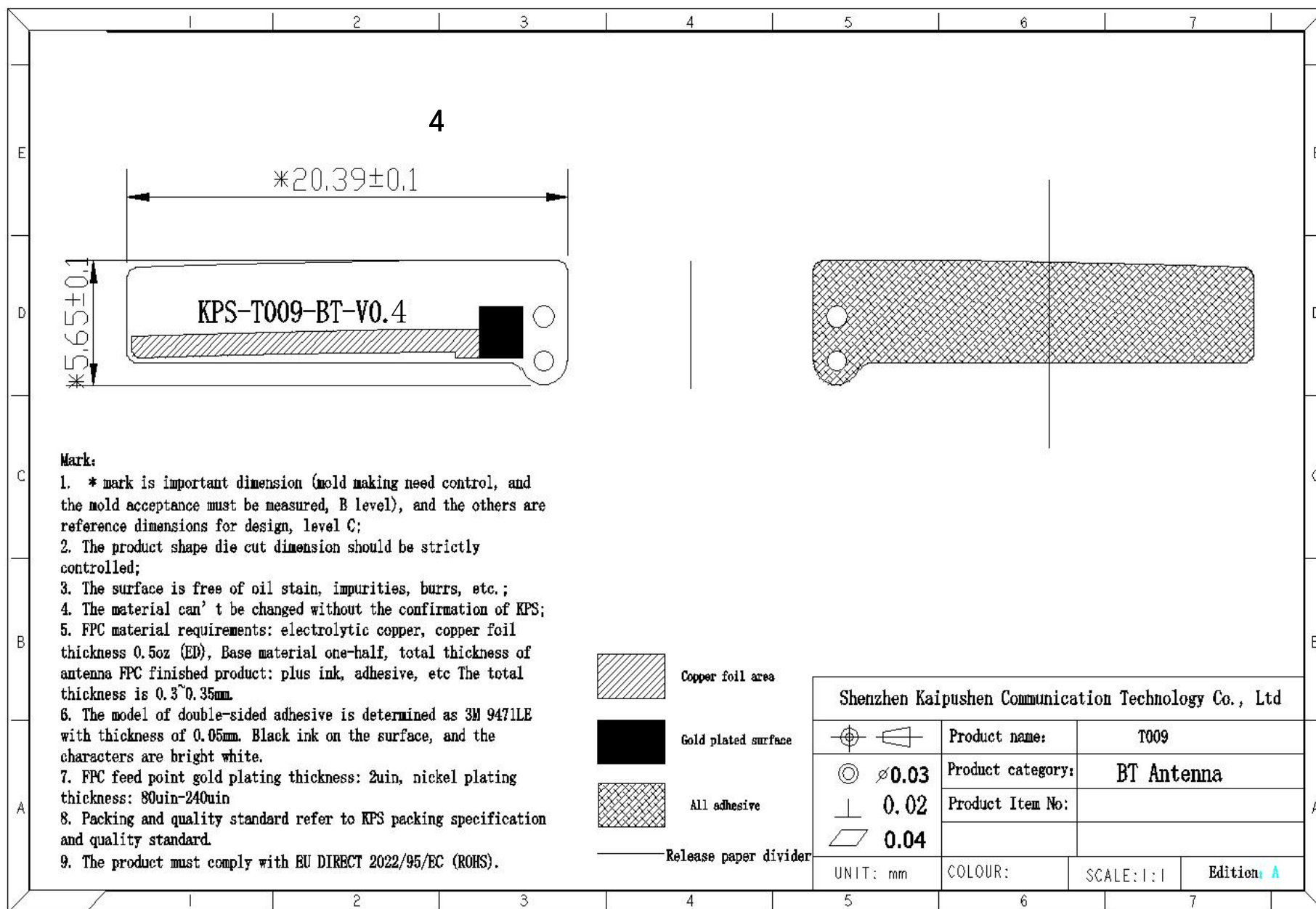
2440.000MHz



2480.000MHz



3.1: antenna icd diagram



Full dimensional measurement report

	Customer	Zhouhai intelligence		Item name		T009							Material	Electrolytic copper
	Supplier	Kaipushen		Measure tools		Quadratic		Measure unit		MM			Measure date	2023/2/15
NO.	Size	Upper	+ TOL.	- TOL.	Lower	Act mea 1	Act mea 2	Act mea 3	Act mea 4	Act mea 5	Act mea 6	Act mea 7	UPPER $\leq$ 100%	LOWER $\leq$ 100%
1	20.39	20.49	0.10	0.10	20.29	20.38	20.37	20.41	20.37	20.38	20.37	20.41	20%	20%
2	5.65	5.75	0.10	0.10	5.55	5.68	5.63	5.67	5.67	5.63	5.67	5.68	30%	20%
3														
4														
5														
6														
7														
8														
9														
10														
11														

Trad: Jian Chen

auditing:xingtuoWu

Salt spray test report

Date: 2023 年 02月 15日

Item	T009-FPC aerial	Customer	Zhouhai intelligence			
Supplier	Shenzhen Kaipushen Communication Technology Co., Ltd	National Test standard	GB/T 2423.2-2008			
Sample situation	Sample qty: 5PCS					
	Base material:A pair of half electrolytic copper	Coating: Gold plated				
Test time	Total 24H					
Test type	☒ NSS	☐ ASS	☐ CASS			
Test condition	Salt solution: 5%		PH:7.0			
	Chamber temp: 35° C		Relative humidity: 85%			
	Spray way: ☒ Continuous ☐ intermittent		Compressed air pressure: 1kg/cm²			
	Salt spray sedimentation rate: 1-2ml/80cm2/h		Fog fluid collection: 1.4ml/80cm2/h			
	Test cycle: __1__cycle		Spray time: 24 h			
Test results	Appearance after test:appearance intact, without obvious change					
	Coating: no spalling, no rust					
	Surface spraying, silk screen: no falling off, no bubbles.					
Explanation: 1、 Salt spray test operating standards in accordance with the People's Republic of China national standard GB/T2423.17-2008 implementation. 2、 The test piece results are determined according to the national standard GB/ T6451-02 of the People's Republic of China.						
Operator by/date: Jian Chen Approved by/date: Wu Xingtuo						

High-low temperature test record

Product name	T009		Customer name	Zhouhai intelligence	
Test qtu	5 pcs		Test date	2023年2月15日	
Cycle number	1		Time	24H	
TestCondition: High temp: + 65 ℃ Humidity: 90 % RH Low temp: - 25 ℃ Test time: high temp: 24 H low temp: 24 H					
Test item	Uncycled test			Cycled test	
No	After high temp	After low temp	After high temp	After low temp	
1	OK	OK			
2	OK	OK			
3	OK	OK			
4	OK	OK			
5	OK	OK			
6	OK	OK			
After test deficiency:					
Reason analysis:					
Improvement measures:					
Test results: √ Pass Fail					

auditing: xingtuoWu

record: jianChen

Packing

Customer:	Zhouhai intelligence	Material name	T009-FPCaerial
packing qty:	one carton	Packing material	Carton
Qty/carton		Packing way	Ziplock bag



Picture 1:Single package



Picture 2: Packing way



Picture 3: Packing view (front, side, top)



Picture 4:packing label