

Shenzhen Kaipushen Communication Technology Co., Ltd

Sample approve sheet

Customer: Leqi

Item name: 3917

Sample name: ZigBee aerial -1

Description/color: black

Release Date: 2022/9/5

Supplier confirmed	Make	R&D	Structure	Quality
	Liu Xiao meng 2022-09-05			

Customer confirmed	Item	Appearance	Structure	Quality

Conclusion	<input type="checkbox"/> MP use <input type="checkbox"/> Limited use () K
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ROHS

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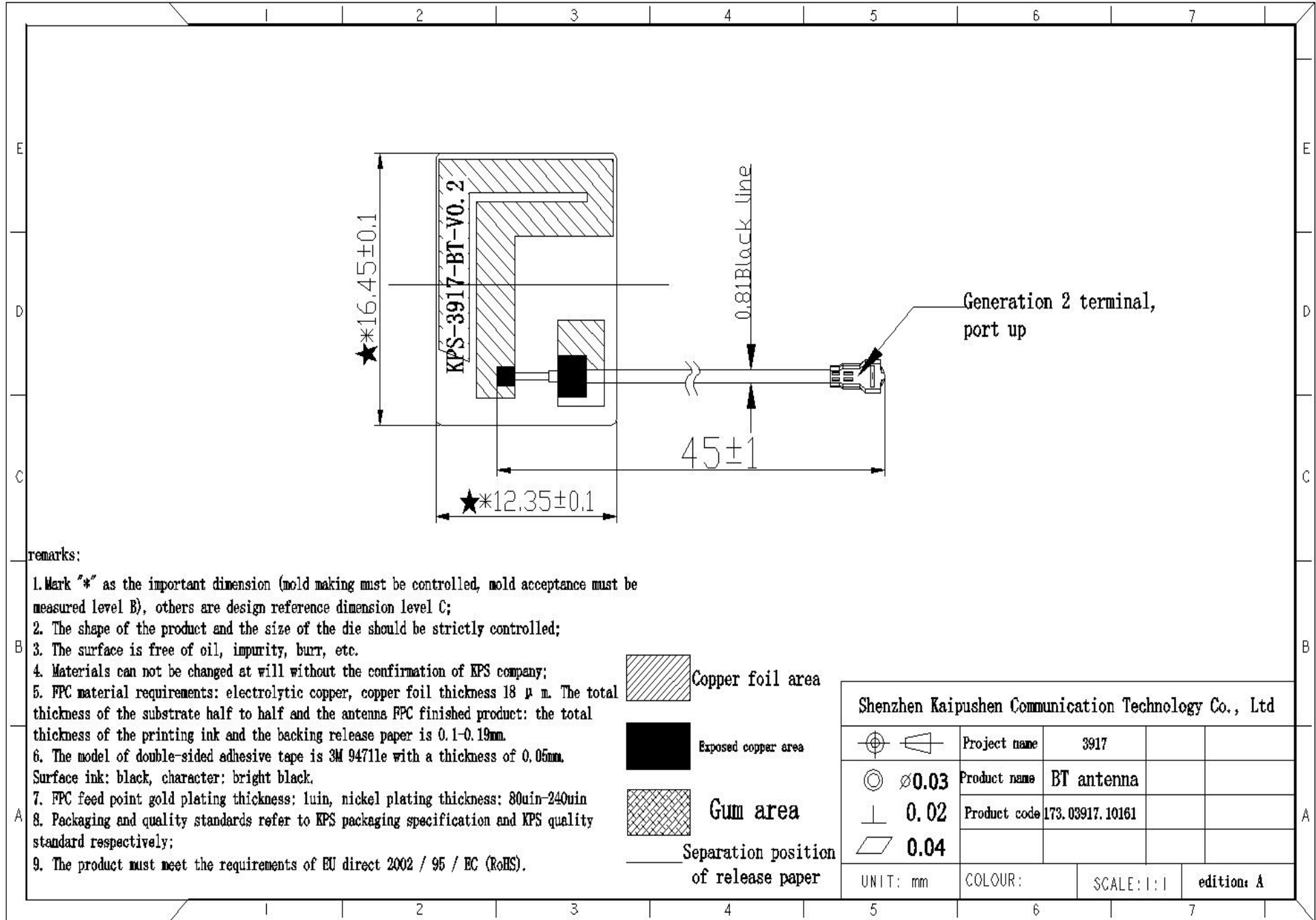
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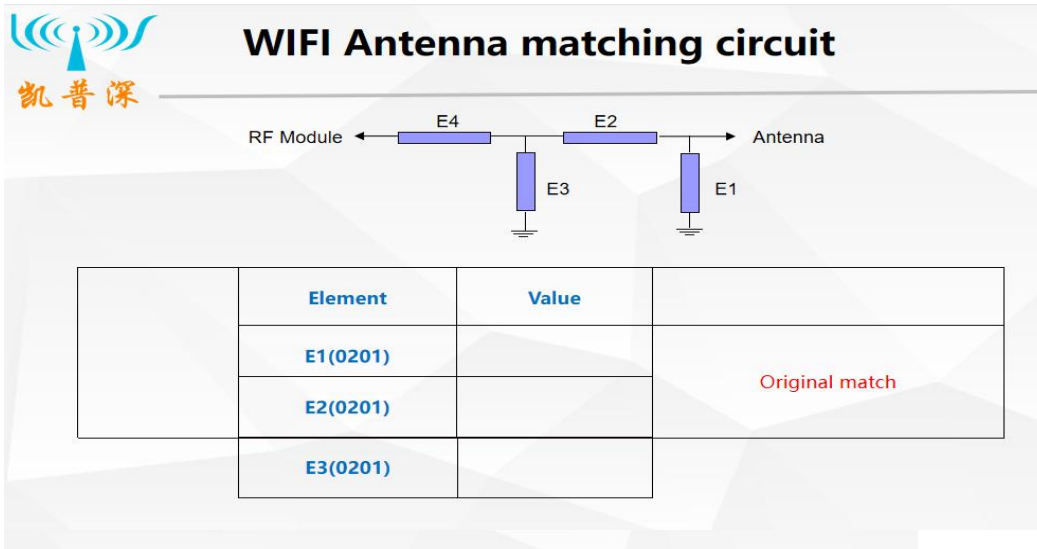
4.1 Aerial function

4.1-1 Specificatin standard

The working frequency band of wifi antenna produces resonance at 2400m-2500m

4.1-2 Matching circuit of antenna.

The antenna matching circuit is as follows:



4.2 Standing wave ratio test (VSWR) :

4.2-1 Test settings

The standing wave ratio test device is connected in turn: E571BNetwork analyzer→

50Coaxial line of OhmCable→150mm long copper pipe→test fixture.

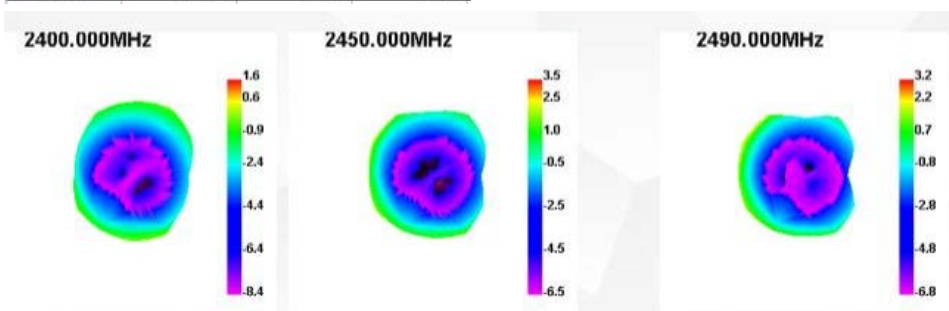
Treatment of test fixture: Use a hard cable to lead out from the 50 ohm test point of the antenna on the PCB of the machine u...SMA-JThe joint is connected with the copper pipe with choke ring, and then connected with other devices.

4.2-2 Voltage standing wave ratio test :

The following table shows: WIFIS tanding wave ratio of edge frequency points of antenna operating frequency band:

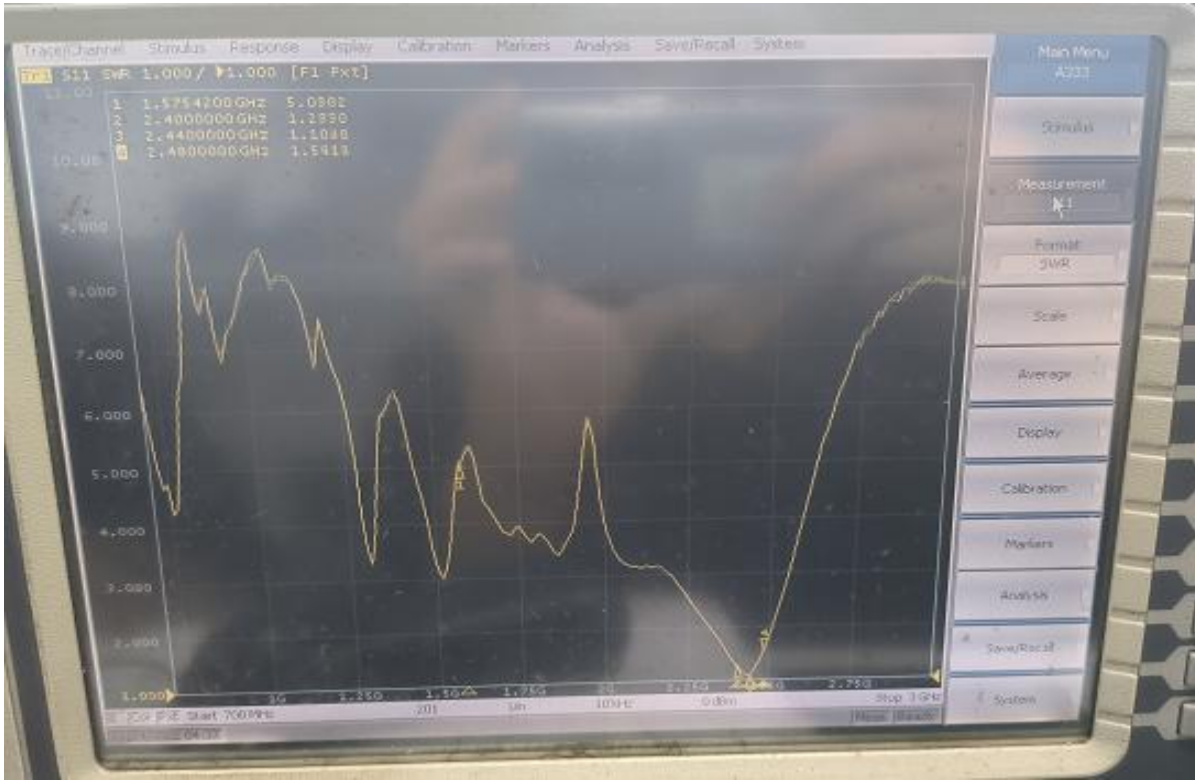
Fre(MHZ)		2400	2450	2500
VSWR		1.1	1.2	1.7

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	43.58	-2.88	2.74
2410	42.25	-3	2.39
2420	43.31	-3.63	2.31
2430	44.16	-3.55	2.41
2440	46.95	-3.28	2.69
2450	46.12	-3.36	2.62
2460	47.04	-3.28	2.6
2470	47.36	-3.25	1.72
2480	47.25	-3.26	1.7
2490	48.69	-3.13	1.85
2500	48.06	-3.18	1.85



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WiFi standing wave ratio curve



4.3 Environmental manipulation:

Environmental treatment of the whole machine

The original environment of the whole machine remains unchanged

Full dimensional measurement report

NO.	Customer	Leqi				Item name 3917							Material	Electrolytic copper
	Supplier	Kaipushen		Measure tools		Quadratic		Measure unit			MM		Measure date	2022/5/2
	dim	URL	+ TOL.	- TOL.	LR	actual 1	actual 2	actual 3	actual 4	actual 5	actual 6	actual 7	UPPER ≤ 100%	LOWER ≤ 100%
1	16.45	16.55	0.10	0.10	16.35	16.47	16.43	16.43	16.44	16.46	16.47	16.47	20%	20%
2	12.35	12.45	0.10	0.10	12.25	12.33	12.37	12.38	12.37	12.37	12.33	12.36	30%	20%
3	45.00	46.00	1.00	1.00	44.00	45.20	45.30	45.20	45.20	45.30	45.20	45.30	30%	0%
4														
5														
6														
7														
8														
9														
10														
11														

Tabulation: Jian Chen

Examine and Verify :Wu Xingtuo

Salt spray test report

Date: 2022 年 09 月 01日

Item	3917-FPC aerial	Customer	Leqi
Supplier	Shenzhen Kaipushen Communication Technology Co., Ltd	National Test standard	GB/T 2423.2-2008
Sample situation	Sample qty: 5PCS		
	Base material:Half to one-third electrolytic copper with glue		
Test time	Total 24H		
Test type:	<input checked="" type="checkbox"/> NSS	<input type="checkbox"/> ASS	<input type="checkbox"/> CASS
Test condition	Salt solution: 5%		PH:7.0
	Chamber temp: 35° C		Relative humidity: 85%
	Spray way: <input checked="" type="checkbox"/> continuation <input type="checkbox"/> intermittence		Compressed air pressure: 1kg/cm ²
	Salt spray sedimentation rate: 1-2ml/80cm ² /h		Fog fluid collection: 1.4ml/80cm ² /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.		
<p>Explanation:</p> <p>1、 Salt spray test operating standards in accordance with the People's Republic of China national standard GB/T2423.17-2008 implementation.</p> <p>2、 The test piece results are determined according to the national standard GB/ T6451-02 of the People's Republic of China.</p>			
Operator by/date: Jian Chen Approved by/date: Wu Xingtuo 2022.09.05			

High-low temperature test record

Product name	3917	Customer name	Leqi	
Test qtu	5 pcs	Test date	2022年9月5日	
Cycle number	1	Time	24H	
Test Condition: High temp: + 65 degrees Humidity: 90 % RH Low temp: - 20 degree Test time: high temp: 24 H low temp: 24 H				
Test item	Uncycled test		Cycled test	
序号	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				
6				
After test deficiency:				
Reason analysis:				
Improvement measures:				
Test results: √ Pass Fail				

auditing: Wuxingtuo

record: chenjian

Packing

Customer:	Leqi	Material name:	3917-FPC aerial
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

Fiction: LiMinghui

auditing: Wu Xingtuo