

样品规格书
SPECIFICATION

Product name : NO25-BT&GPS Antenna

Model : 816-002-01A01

Date : 25/11/2022

R&D Engineer _____ Hardware Engineer _____ Person in charge _____

Contents

One. The Cove	1
Two. Directory	2
Three. Change the resume	3
Four. Electrical characteristic	4-6
Five. 2D diagram of antenna structure	7
Six. Key material list & BOM form	8
Seven. Full size Measurement Report	9
Eight. Cpk report	10

Three. Change the resume

Serial number	Change date	Project name	version	Change content	Remarks
1	2022.11.25	N025-BT&GPS antenna	V1.0	There is no	New edition

Four. Electrical characteristic

1. Antenna Structure



Figure antenna structure

2. Passive parameter



3.Passive efficiency and gain

Passive efficiency - Loose								
Freq (MHz)	Effi (dB)	Effi (%)	Gain (dBi)		Freq (MHz)	Effi (dB)	Effi (%)	Gain (dBi)
1525	-4.75	33.47	-1.34		2400	-4.32	36.95	-2.05
1535	-4.61	34.62	-1.27		2410	-4.75	33.51	-2.51
1545	-4.69	33.93	-1.22		2420	-4.81	33.02	-2.5
1555	-4.72	33.75	-1.19		2430	-4.99	31.67	-2.68
1565	-5.04	31.34	-1.58		2440	-4.97	31.88	-2.43
1575	-5.27	29.7	-1.77		2450	-5.1	30.87	-2.24
1585	-5.51	28.12	-2.03		2460	-5.42	28.7	-2.56
1595	-5.76	26.54	-2.26		2470	-5.51	28.15	-2.62
1605	-5.48	28.34	-1.87		2480	-5.65	27.25	-2.81
1615	-5.65	27.23	-2.19		2490	-5.78	26.42	-2.95
1625	-6.06	24.76	-2.4		2500	-6.13	24.39	-3.18
Passive efficiency - Arm								
Freq (MHz)	Effi (dB)	Effi (%)	Gain (dBi)		Freq (MHz)	Effi (dB)	Effi (%)	Gain (dBi)
1525	-11.07	7.81	-5.97		2400	-10.58	8.74	-3.46
1535	-11.29	7.43	-5.54		2410	-10.65	8.61	-3.57
1545	-11.2	7.58	-5.65		2420	-10.79	8.33	-3.53
1555	-11.36	7.32	-6.04		2430	-10.83	8.25	-3.82
1565	-11.38	7.28	-5.99		2440	-11.11	7.74	-3.91
1575	-11.68	6.8	-6.23		2450	-11.15	7.67	-3.93
1585	-11.82	6.58	-6.3		2460	-11.32	7.37	-4
1595	-11.91	6.44	-6.46		2470	-11.29	7.43	-4.03
1605	-12.14	6.11	-6.21		2480	-11.46	7.14	-4.22
1615	-12.17	6.07	-6.87		2490	-11.74	6.69	-4.47
1625	-12.3	5.89	-6.91		2500	-11.86	6.52	-4.62

4. OTA data

GPS/arm	-144.74
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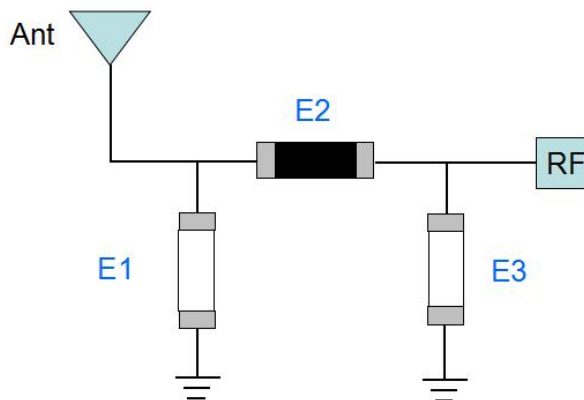
BT-arm			
Test	BT		
Result	0	39	78
TRP (dBm)	-4.09	-4.5	-4.51
TIS (dBm)	-82.22	-82.35	-82.09

5. Environmental treatment

Here the conductive sponge screen shield。



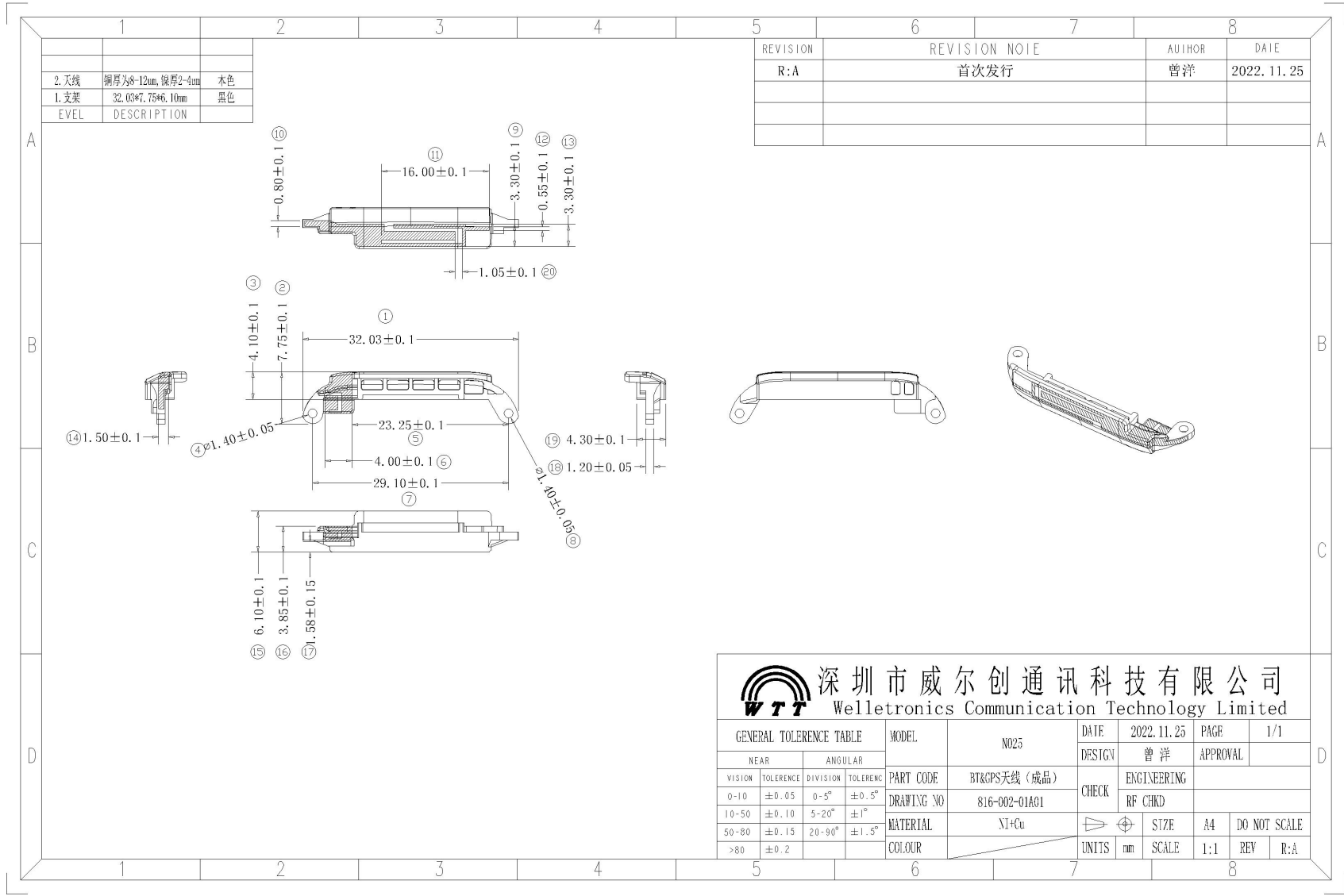
6. Antenna matching



BT信号点匹配	
Element	Value
E1 (0201)	N/A
E2 (0201)	0Ω
E3 (0201)	N/A

Note: The match is unchanged

Five. 2D diagram of antenna structure



Six.Key material list &BOM form

Key material list &BOM form					
Customer	Zhouhai	Written By	Xiaojie	Orig. Date	2022-11-22
Part Number	816-002-01A01	Revised By	Yaokun	Revised Date	2022-11-22
Description	N025 BT&GPS天线	Approved By	Liutianhua	Approved Date	2022-11-22
Subpart Name		Material Name		Material supplier	
material		LDS		Charber	
plating		Copper plating (CU)		Zhong rui	
plating		Nickel plating (NI)		Zhong rui	

[illegible]

Eight.Cpk report

CPK Report

Part Number	816-002-01A01		Vendor	WTT	
Description	N025 BT&GPS antenna		Inspected	Xiaojie	
Tool Number			Inches/MM	mm	
Cavity			Material Name	FPC	
			Material Code		
Revision	R:A		Date	2022-11-22	
Dim. Designator	1	2			
Nominal	32.03	7.75			
+ Tolerance	0.15	0.15			
- Tolerance	-0.15	-0.15			
Upper Limit	32.18	7.90			
Lower Limit	31.88	7.60			
1	32.01	7.73			
2	31.99	7.76			
3	32.01	7.71			
4	32.07	7.73			
5	32.05	7.75			
6	32.00	7.70			
7	32.05	7.75			
8	32.00	7.73			
9	32.05	7.70			
10	32.10	7.78			
11	32.00	7.76			
12	32.01	7.80			
13	32.05	7.70			
14	32.05	7.71			
15	32.00	7.75			
16	32.05	7.72			
17	32.08	7.70			
18	32.05	7.73			
19	32.00	7.70			
20	32.03	7.75			
21	32.06	7.73			
22	31.99	7.70			
23	31.98	7.78			
24	31.96	7.76			
25	32.03	7.80			
26	32.10	7.70			
27	32.06	7.71			
28	32.00	7.70			
29	32.01	7.76			
30	32.00	7.79			
MAX.	32.10	7.80			
MIN.	31.96	7.70			
AVERAGE	32.03	7.74			
STDEV	0.04	0.03			
CP	1.40	1.53			
Cpk	1.38	1.39			
TOOLING	CMM	CMM			

audit: Yaokun

tabulation: Xiaojie