

司南微电子（深圳）有限公司

SINAWELL Electronics(Shenzhen) Co., Ltd.

Customer Name	Shenzhen cannice Technology Co., Ltd
Product Name	A1355-R
Customer Item Number	
Project name	A1355-R
Product brand	
Product model	

Appendix	☒ cover	☒ buleprint	☐ FAI report	☐ CPK report告
	☒ Reliability Test Report	☐ 3D model	☒ RoHS	☐ UN38.3

Supplier	Make	Audit	Approval
Signature	Chen de	Li xiao long	Zhang ping

Customer	Make	Audit	Approval
Signature			

Admit condition	☐ admit	☐ Denial of recognition
	☐ Conditional recognition Conditions to be satisfied:	
	☐ Provisional recognition limit____PCS	

Supplier Information:	
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Rev: B

The Main Antenna Sample Confirmation

Customer	Shenzhen CANNICE Technology Co., Ltd.		
Project Name	A1355-R		Date 2024-07-23
Project NO.		Notes	FPC
Frequency Range	BT		
Designed By	RF Engineer	Structural Engineer	
Checked By	Engineering Manager		
Client' s Approval			

Designer: SINAWELL Electronics(Shenzhen) Co., Ltd.

Add: 712-717, Block A Jinfulai Building,49-1 Dabao Road,Xinan 28th area,Baoan District,Shenzhen,China

Table of Contents

1. Specification description.....	1、 2
1. Summary of specifications	3
2. Appearance	3
3. Electrical performance.....	3
3.1. Antenna band.....	3
3.2. Matching circuit.....	3
3.3. Return Loss.....	3
3.4. Antenna Gain.....	5
4. Appearance structure.....	5
4.1. Antenna Material.....	5
5. Remarks	5
Appendix I (Mechanical drawing).....	6
Appendix II (Performance Report)	7-10

1. Specification description

This specification describes the status of the A1355-R internal antenna with a frequency band of 2400MHz-2500MHz.

2. Antenna appearance

3. Electrical performance

3.1. Antenna band

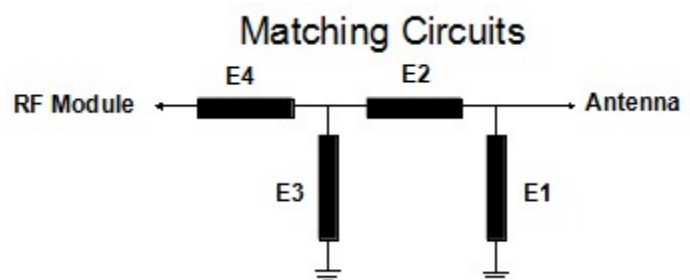
	BT
Transmitting band(MHz)	2400MHz-2500MHz

3.2. Matching Circuit

After the test point is at the antenna connector (RF test port), see the figure below.

1. BT antenna matching.

Element	Value
E1(0402)	NC
E2(0402)	0 Ω
E3(0402)	NC
E4(0402)	0 Ω



3.3. Return Loss

BT VSWR+ Return

	Resonant Point Range(MHz)	Frequency point(MHz)/Maximum Echo Loss(dB)		
	2400-2500		2400	2500
		VSWR	1.28	1.38
		Return loss	-18.2	-15.9

3.4. Antenna Gain

Freq	Effi	Effi	Gain
(MHz)	(%)	(dB)	(dBi)
2400	14.47	-8.4	-2.37
2410	17.23	-7.64	-1.8
2420	19.25	-7.16	-1.46
2430	22.54	-6.47	-0.79
2440	23.95	-6.21	-0.41
2450	23.3	-6.33	-0.32
2460	24.92	-6.03	0.22
2470	24.04	-6.19	0.38
2480	23.68	-6.26	0.51
2490	22.86	-6.41	0.48
2500	21.67	-6.64	0.41

4. Appearance structure

4.1. Antenna Material

5. Notes

(Electrical Performance Test Report)

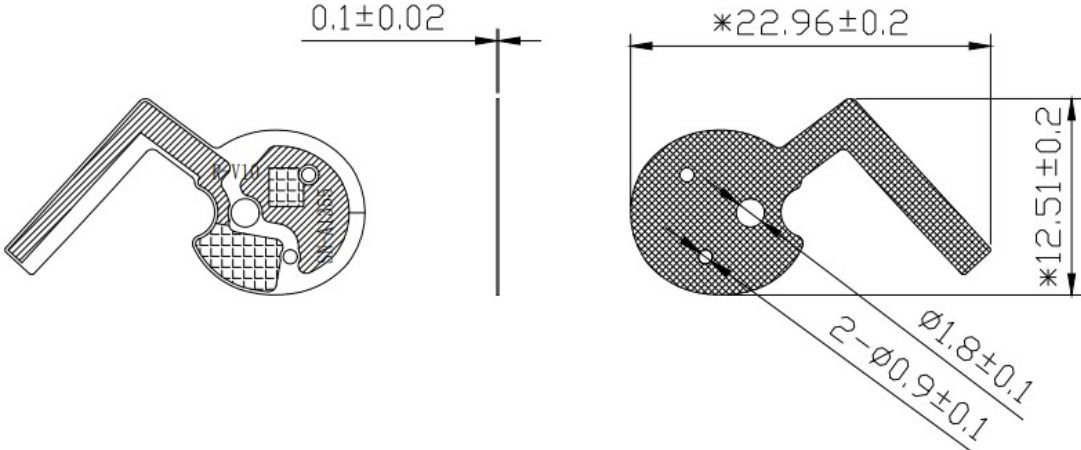
In the electrical performance test report, the 3D darkroom data for manufacturers are provided.

The following table format

Appendix 1: (Mechanical drawing)

Appendix II (Performance report)

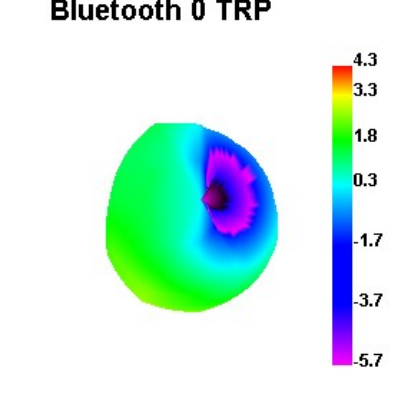
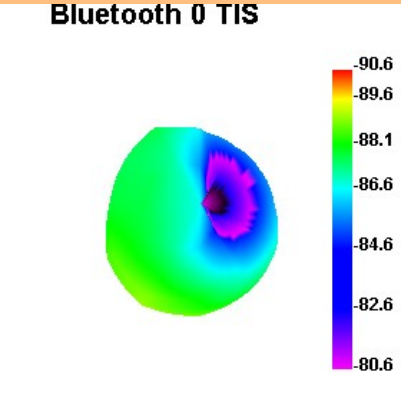
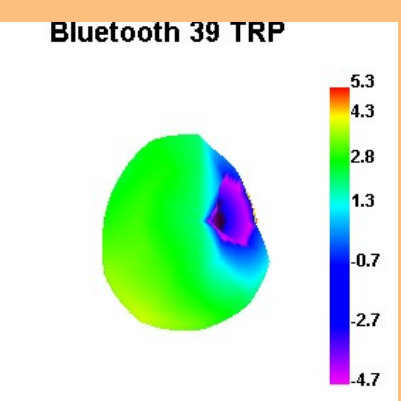
FPC Mechanical drawing(Annex I)

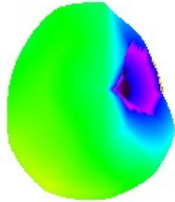
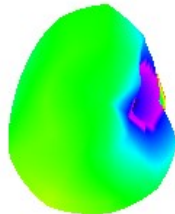
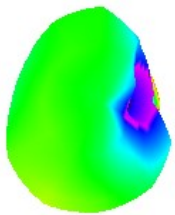
1	2	3	4	5	6	7	8																																
		<table border="1" style="float: right; font-size: 8px;"> <tr> <th colspan="3">The third person</th> </tr> <tr> <td>0~10</td> <td>±0.05</td> <td>○ 0.02</td> </tr> <tr> <td>10~18</td> <td>±0.10</td> <td>⊙ 0.03</td> </tr> <tr> <td>18~30</td> <td>±0.12</td> <td>⊥ 0.02</td> </tr> <tr> <td>30~40</td> <td>±0.15</td> <td>∠ 0.04</td> </tr> <tr> <td>40~</td> <td>±0.20</td> <td>Angle ±0.5°</td> </tr> </table>						The third person			0~10	±0.05	○ 0.02	10~18	±0.10	⊙ 0.03	18~30	±0.12	⊥ 0.02	30~40	±0.15	∠ 0.04	40~	±0.20	Angle ±0.5°														
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Notes: 1. "*" is the key dimension ; 2. Please refer to the drawing if no dimension is indicated; 3. Meet rohs2.0, reach environmental protection requirements.		<table border="1" style="width:100%; font-size: 8px;"> <tr> <td>No.</td> <td>Part name</td> <td>Material</td> <td>Color</td> <td>Thickness</td> </tr> <tr> <td>1</td> <td>BT antenna</td> <td>Electrolytic copper Half to half substrate</td> <td>Black</td> <td>Gold Finger Plating AD: 3M9471</td> </tr> </table>						No.	Part name	Material	Color	Thickness	1	BT antenna	Electrolytic copper Half to half substrate	Black	Gold Finger Plating AD: 3M9471																						
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Focus on size

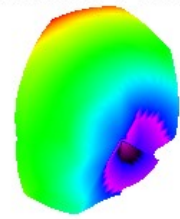
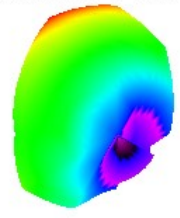
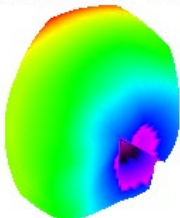
NO	Size (mm)	Tolerance(mm)	Notes
1	22.96	±0.2	
2	12.51	±0.2	
3			
4			
5			
6			

3D Test Report (FS)

BT	Channel	3DCoupling Test	Field strength map
TRP	0	1.09	Bluetooth 0 TRP 
TIS	0	-87.37	Bluetooth 0 TIS 
TRP	39	1.45	Bluetooth 39 TRP 

TIS	39	-86.5	Bluetooth 39 TIS 
TRP	78	0.35	Bluetooth 78 TRP 
TIS	78	-85.77	Bluetooth 78 TIS 

3D Test Report (BH)

BT	Channel	3DCoupling Test	Field strength map
TRP	0	-0.78	Bluetooth 0 TRP  4.8 3.2 0.8 -1.7 -4.9 -8.1 -11.3
TIS	0	-83.88	Bluetooth 0 TIS  -89.5 -87.8 -85.4 -83.0 -79.8 -76.5 -73.3
TRP	39	-1.03	Bluetooth 39 TRP  4.5 2.6 0.2 -3.0 -6.8 -10.6 -14.3

TIS	39	-84.92	Bluetooth 39 TIS Color scale: -90.4, -88.6, -85.7, -82.9, -79.2, -75.4, -71.6
TRP	78	-1.57	Bluetooth 78 TRP Color scale: 3.7, 2.1, -0.3, -2.8, -6.0, -9.2, -12.5
TIS	78	-84.69	Bluetooth 78 TIS Color scale: -90.0, -88.4, -85.9, -83.5, -80.3, -77.0, -73.8