

司南微电子(深圳)有限公司

SINAWELL Electronics(Shenzhen) Co., Ltd.

Customer N	Vame	Shenzhe	Shenzhen cannice Technology Co., Ltd					
Product Na	ame	A1361-R						
Customer I	Item Number							
Project na	ame	A1361-R	(
Product br	rand	SN						
Product mc	ode1	SN1202	.–BT–R					
	■ cover		■ buleprint	□ FAI report	□ CPK report告			
Appendix	Keliabilit	y Test Repor	et □ 3D model	- (福圳)	□ UN38.3			
			變	S. A. S.				
Supplier	Make		Audit	型型	Approval			
Signature	Chen d	.e	Li xiao	卫程专用草	Zhang ping			
Customer	r Make		Audit		Approval			
Signature	;							
				,				
	□ admit		□ Denial of	recognition				
Admit	□ Condition	nal recoş	gnition Condit	ions to be sati	sfied:			
condition	☐ Provision	nal recog	gnition limi	tPCS				
Supplier In	nformation:							
Name : SIN	AWELL Electr	onics(Sh	nenzhen) Co., Ltd	d. Contact	s: Zhang wen feng			
ADD: 708-7	/18, Jinfulai Bui	lding, 49-1	l Dabao Road, Xin'an	28 District, Bao'an	District, Shenzhen			
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Rev: B

EMAIL: zwf@sinawell.cn



The Main Antenna Sample Confirmation

Customer	Shenzhen CA	nology Co., Ltd.				
Project Name	A1361-R	A1361-R		A1361-R		2024-04-19
Project NO.	SN1202-BT-R	FPC				
Frequency Range	BT					
Designed By	RF Engineer Structural Engine			gineer		
CI I I D	Engineering Manager					
Checked By						
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



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1. Specification description

This specification describes the status of the A1361-R internal antenna with a frequency band of $2400 \, \text{mHz} - 2500 \, \text{mHz}$.

2. Antenna appearance



3. Electrical performance

3.1. Antenna band

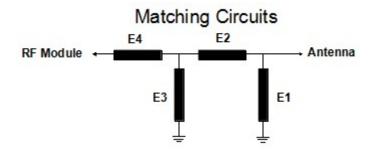
	BT
Transmitting	2400MHz-2500MHz
band(MHz)	

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)	2.2PF
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	1.36	1.52	
	Return loss	-16.3	-13.7	

3.4. Antenna Gain

Freq	Effi	Effi	Gain
(MHz)	(%)	(dB)	(dBi)
2400	15. 15	-8.2	-1.19
2410	18.49	-7.33	-0.43
2420	19.9	-7.01	-0.24
2430	22.03	-6.57	0.14
2440	24. 29	-6 . 15	0.54
2450	25. 78	-5.89	0.78
2460	26.98	-5.69	0.95
2470	26. 23	-5.81	0.89
2480	26. 97	-5.69	0.99
2490	25. 56	-5.92	0.81
2500	25.11	-6	0.92

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.

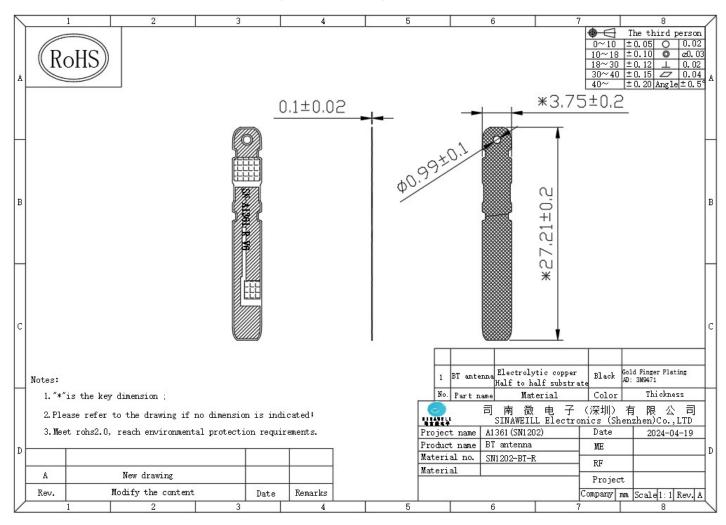
The following table format

Appendix 1: (Mechanical drawing)

Appendix II (Performance report)



FPC Mechanical drawing(Annex I)



Focus on size

NO	Size	Tolerance(mm)	Notes
	(mm)		
1	27. 21	± 0.2	
2	3. 75	± 0.2	
3	0. 1	± 0.02	
4			
5			
6			



3D Test Report (BH)

3D Test Kep	ort (DII)	,	
ВТ	Channel	3DCoupling Test	Field strength map
TRP	0	-3.98	Bluetooth 0 TRP -0.6 -3.8 -8.6 -13.4 -19.9 -26.3 -32.7
TIS	0	-80.18	Bluetooth 0 TIS -79.4 -75.5 -69.6 -63.8 -55.9 -48.1 -40.3
TRP	39	-3.04	Bluetooth 39 TRP -3.0 -8.0 -13.0 -19.7 -26.4 -33.1



Confirmation of Sample 样品承认书

TIS	39	-80.31	Bluetooth 39 TIS -84.8 -80.8 -74.8 -68.9 -60.9 -53.0 -45.1
TRP	78	-3.9	Bluetooth 78 TRP -1.6 -4.0 -7.4 -10.9 -15.5 -20.2 -24.8
TIS	78	-80.23	Bluetooth 78 TIS -83.6 -81.3 -77.8 -74.3 -69.7 -65.1 -60.5



Size Report

	Customer	cannice	Project Name	A1361-R		Measurement Date	2024-0)4-19
	Supplier	sinawell	Measurement Tool	Quad	dratic	Unit	mm	
NO	dimension	Toleranca	Measure 1	Measure 2	Measure 3	Measure 4	Measure 5	determine
1	3.75	±0.2	3.73	3.72	3.73	3.72	3.70	OK
2	27.21	±0.2	27.31	27.33	27.30	27.33	27.35	OK
3	0.99	±0.1	0.96	0.98	0.97	0.92	0.94	OK
4	0.1	± 0.02	0.11	0.11	0.11	0.11	0.11	OK
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DRAWN BY: De Chen APPROVED BY: Wenfeng Zhang



Salt fog Report

Customer Name	CANNICE	Corax	A1361-R	Tester	De Chen			
Test Quantity	5PCS	Test Item	Salt fog	Test Date	2024-04-19			
	1.Temperature: 35°	°C						
	2.Humidity: 98%,	PH: 6.5-7.2						
Test conditions	3.Temperature in the	e box: 37℃						
	4.Test duration: 24	hours						
	5.Drug concentratio	5.Drug concentration: 5%NaCl						
	1.Put the product in the salt mist box.							
	2.Place the product at the right angle.							
Testing procedure	3.set the relevant parameters and start the spray.							
	4.Complete the removal of the experimental product. Before inspection, wash the product with clean							
	water and place it at room temperature for two hours.							
	Projects	Before testing	After testing	test result	remarks			
	Coating	/	/	/				
TEST	Conductivity	Well	Well	qualified				
	Resistance	Well	Well	qualified				
	Cohesion	Well	Well	qualified				

DRAWN BY: De Chen

APPROVED BY: Wenfeng Zhang



Explanation of FPC Preservation Period

- I .Preservation conditions: temperature 21 +4: humidity 60% H +10%.
- II. Exit Guarantee
 - 1. Appearance Guarantee: No oxidation occurs during 12 months of storage in original packaging.
 - 2. Functional Assurance
 - A:One year to ensure good welding continuity.
 - B:Ensure good conductivity within two years.

III Points for Attention in FPC Welding

1. FC itself has hygroscopicity. It is suggested to preheat the three-layer plate (including) for 30 minutes before use, and bake it for 120 minutes at 100 in order to avoid bursting due to hygroscopicity and rapid oxidation during operation.

2. HOT BAR jobs

A: FPC is used for cooked pressing. CVI should be crossed over glass to avoid suspension, resulting in fracture of copper during bending.

- B: FPC avoids the use of dead angle and is liable to cause fracture.
- 3: SMT operation: The plating part should be shielded to prevent atomization in flow welding.
- 4: Hand welding operation: the working temperature of soldering iron should not exceed 290 C, and the time of soldering iron staying on the plate surface should not exceed 10 seconds.





<u>覆铜板检验报告</u> PI CCL Quality Test Report

日期 (DATE): 2023-11-09

品名(Product Name)	SHISE252018FY1		
PI 厚度 (PI film Thickness)μm	25		
接着剂厚(Adhesive Thickness)μm	20		
铜箔厚度(Copper Foil Thickness)μm	18		
幅宽 (Width) mm	250		
生产日期 (P/Date)	2023-11-08		
保质期(Shelf life)	2023-11-08-2024-11-07		

工厂地址: 江苏省太仓市太平北路 168 号 TEL: 0512-53378333 FAX: 0512-53378355 Factory Address: No. 168 Taping North Road, TaiCang City, JiangSu Province, China.

		测试结果(Result)				
测试项目 I tem		品质标准 (Spec)	生产批号 (LOT NO.):			测试方法 .
			23B08A**	***		(Test Method)
厚度 Thickness (μm)		±10%	63	***		SERENGET I SPEC
剥离强度 Peel Strength(kgf/cm)	A面	≥0.7	1. 22	***		IPC-TM-650 2. 4. 9
	B面	>0. 7				
尺寸安定性 Dimensional Stability(%)	MD	≤±0.2%	-0. 0853	Nothing		IPC-TM-650
	TD	10.2%	0. 0873	Follows		2. 2. 4
焊锡耐热性 Solder Resistance		300℃*10SEC 无分层起泡	PASS	***		IPC-TM-650 2. 4. 13
外观 Appearance		无凸点、撞损、裁 切不良、皱痕等等	OK	***		SERENGETI SPEC

- 注: 1、保存条件: 常温常湿保存一年 (Deadline of reserve is 1 year in normal condition)。
 - 2、以上测试项目仅供参考 (Above test for reference only)。

苏州蔡伦格蒂电子材料有限公司

审核:



Quality Assurance Certificate

Customer Name: Shenzhen Kenaixin Technology Co., Ltd

Our commitment A1361 product, Has been produced and inspected according to your company's technical quality indicators or supply quality agreement, All indicators are qualified, Factory approval.



Product raw material list

Category	Name of	Material	Suppliers
	material	pecifications	
	Substrate	Half-and-half	Cai Renge
		adhesive	di
FPC		substrate	
	Back Glue	3M 9471 LE	3M
	Positive ink	Black oil	U-LI
		(PSM-800)	
	Character ink	hite characters	Glory
		(KTM-150F)	
	Gold plated	1 U	Get Rich