

The Main FPC Touch & Antenna Sample Confirmation

Customer	Shenzhe TANGMAI Technology Co., Ltd.		
Project Name	T750S-L		Date 2023-2-11
Project NO.		Notes	FPC Antenna
Customer material NO.	SN0992		
Frequency Range	BT		
Designed By	RF Engineer	Structural Engineer	
Checked By	Engineering Manager		
Client' s Approval			

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

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1. Specification overview

This specification describes the condition of the T7550S-L built-in FPC antenna in the BT frequency band.

2. FPC Touch + antenna appearance



3. Electrical property

3.1. Antenna band

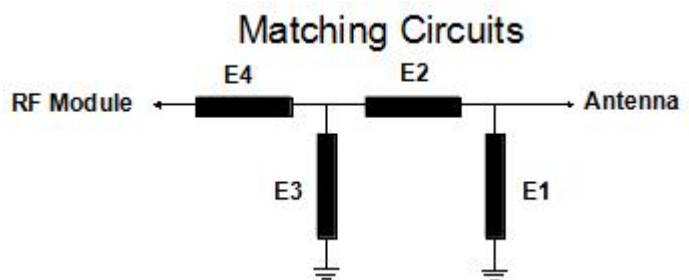
	BT
Transmitting band(MHz)	2400MHz-2500MHz

3.2. Matching circuit

Test point is behind antenna connector (RF test port), see figure below

1. BT antenna matching.

Element	Value
E1(0402)	The motherboard match is not modified
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 return loss(dB)		
	2400-2500		2400	2500
		VSWR	1.45	1.34

		Return loss	-15	-17
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3.4. Antenna gain

Frequency range	Antenna gain
2400-2500MHz	1dBi

4. Appearance structure

4.1. FPC Antenna material
FPC

5. Note

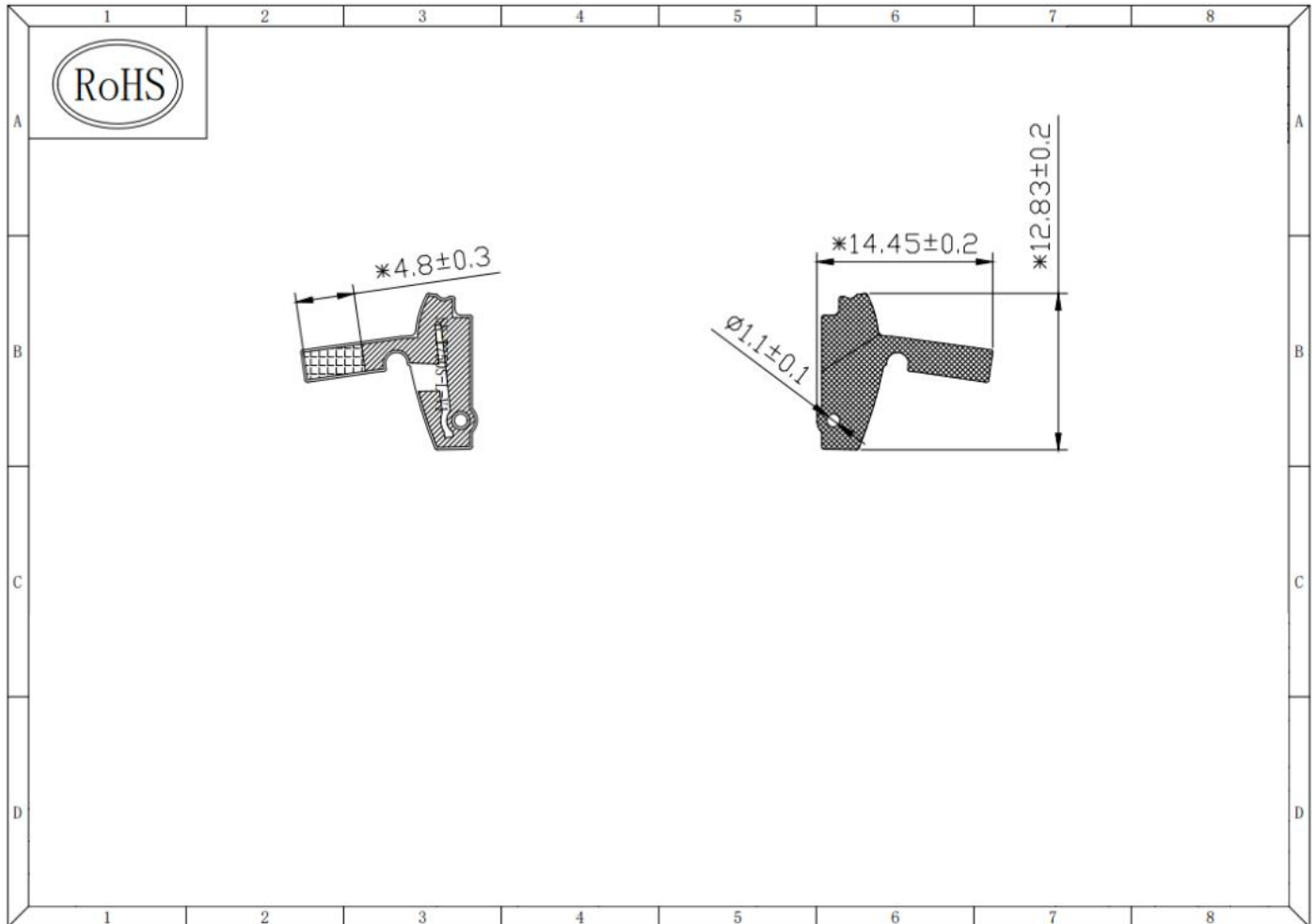
(Electrical performance test report)

In the electrical performance test report, 3D darkroom data provided by the manufacturer,
The following table format

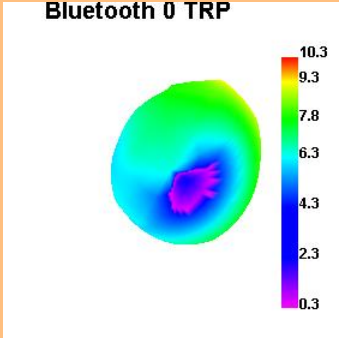
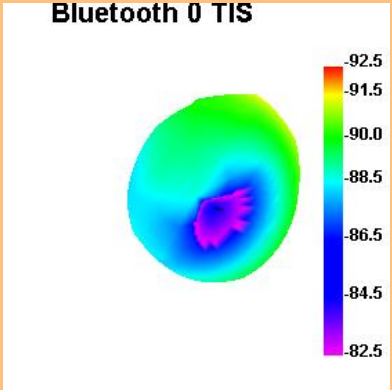
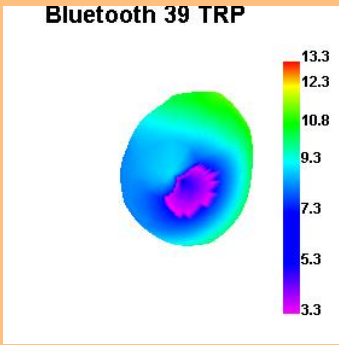
Appendix I: Structural drawings

Appendix II (Electrical Performance Test Report)

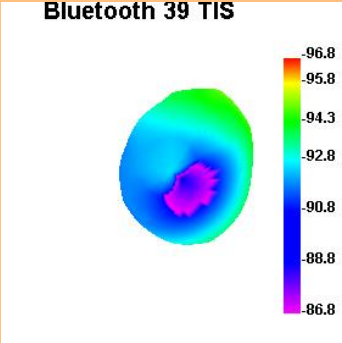
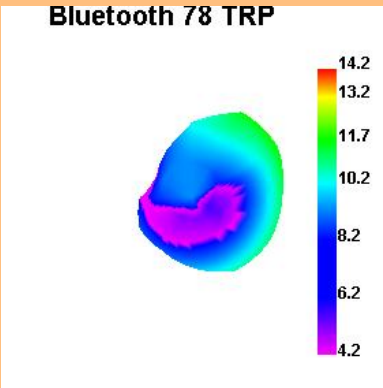
FPC Structural Drawings



3D Test Report

BT	Channel	3D coupling testing	field strength pattern
TRP	0	6.2	Bluetooth 0 TRP 
TIS	0	-88.34	Bluetooth 0 TIS 
TRP	39	8.58	Bluetooth 39 TRP 

Confirmation of Sample

TIS	39	-92.02	Bluetooth 39 TIS
TRP	78	9.05	Bluetooth 78 TRP
TIS	78	-90.55	Bluetooth 78 TIS