

SPECIFICATION

Shenzhen Strongpower Communication Co., Ltd

Shenzhen Strongpower Communication Co.,Ltd.

KP100-NFC Antenna

Guest	ATEL	Frequency	NFC:13.56MHz
Name	KP100		
ID	RQ03B140753B-NFC	Colour	Black
RF Design	宋旭辉	Structure	周 俊
Technical director	傅以成	Date	2024.08.16

Customer confirmation:

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一、NFC Antenna

1. Specification

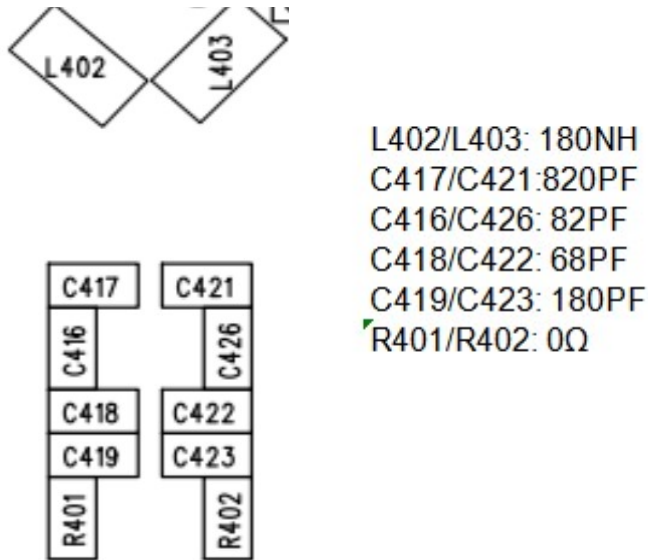
This report mainly provides the test status of various electrical and structural performance parameters of KP100 NFC antenna.

1.1 Electrical specification standard

1.1.1 Electrical performance index

Antenna operating band: 13.56MHz. The following table is an indicator of the electrical performance of Ruiqiang designed and mass-produced antennas

1.1.2 Match the circuit diagram..



1.2 Antenna composition: Black FPC composition.

2. The Equipment of Active Test (Test environment)

Multi-Probe OTA Measurement System 4×4×4(m)

CMW500 E5071B

network analyzer-R&S ZVL

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3. Test

3.1 Passive (Smith) Test

3.1.1 Test connection: The VSWR test device is connected as follows: R&S ZVL network analyzer → test line → test machine
Actual measurement (see next page for drawings)



3.2 Active (swipe distance) Test



Frequency point of whole machine	Test card	Card swiping distance (10MM)
13.56	Tag4-A	28MM
	14443-4A	

4. Conclusion

This antenna is designed on the basis of the prototype provided by the customer, the electrical parameters and structural performance have reached the technical requirements, please confirm!

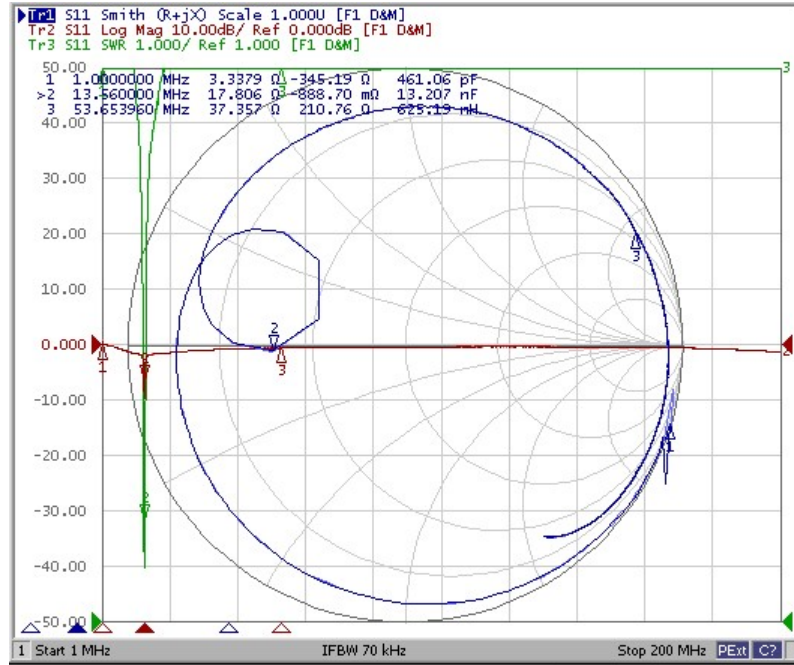
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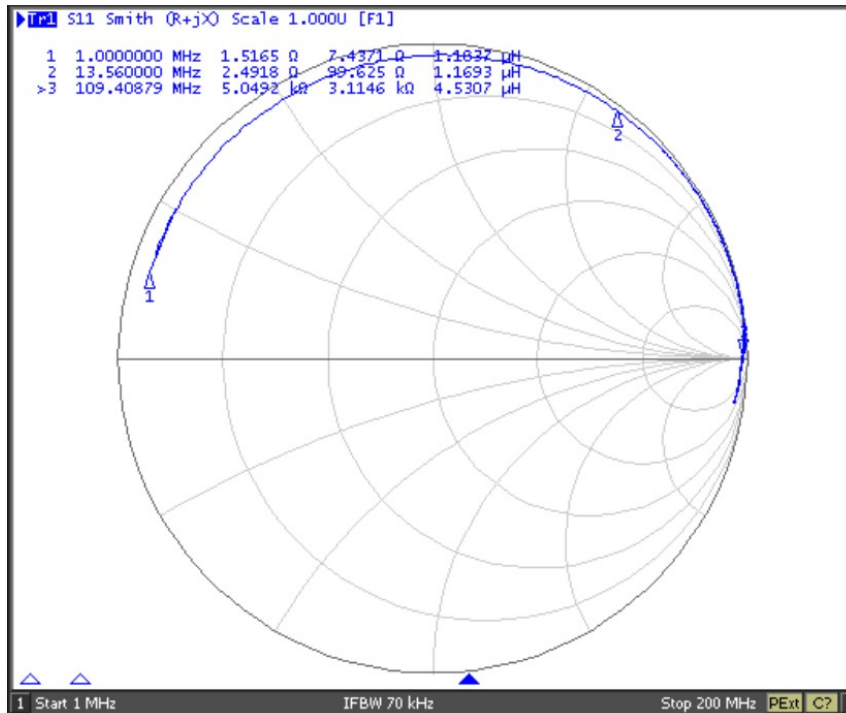
5. Attached chart

(Return loss, Smith chart and VSWR parameter chart)

NFC antenna debugging status



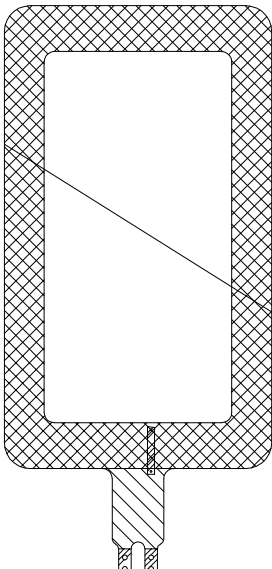
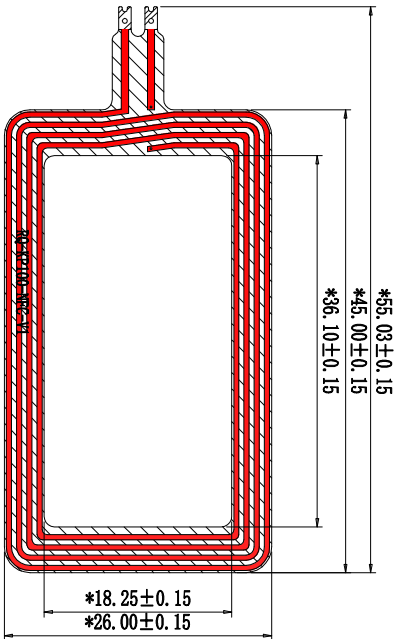
NFC antenna original state



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黑色哑光油墨印刷白色字体
Black matte ink prints white lettering
整版出货
Full page shipment



This antenna is printed with
black ink on both sides

NOTES:

1. Copper; Base material; Gilded Area; Adhesive backing;
2. The knife mold should not hurt the line, and the gold-plated area should be connected to the line;
3. The surface should not have dirt, abrasions, black spots, fracture and falling off after gold plating;
4. Material: FPC single sideboard[PI(EP)A pair and a half of Base material + Adhesive(3MA67 0.15mm)+Surface Black ink(新韩)(>0.01mm)];
5. Reverse adhesive backing 3MA67;
6. The surface of the gold finger is gilded(Thickness: 0.5u"-1.5u"),

There should be no oxidation(Salt spray test is required); After 48±1 hours of salt spray experiment, there were no corrosion spots on the surface and the coating fell off;

7. * is the key size, and the tolerance is not marked, please check according to the B-level tolerance.

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