



Shenzhen Shuodian Electronic Technology Co.,Ltd
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Gauge book

for

2.4G/5.8G WIFI FPC antenna

Customer
item

Material number of our company

SD653-2.4/5.8G-WIFI-FPC

Compilation: Zeng Xiaofeng

Audit: Li Ming Date: April 22,

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Shenzhen shuodian electronic technology co., ltd



catalogue

Gauge book 1

Shenzhen shuodian electronic technology co., ltd.

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1.Both parties confirm

1.1 Customer confirmation signature

Customer:

Customer department/position	Confirming signature	Confirmation date
Hardware/RF		
structure		
project manager		
Business/procurement		
check		

1.2 Shuodian Science and Technology Confirmation Signature

Department/position	Confirming signature	Confirmation date
Antenna engineer		
construction engineer		
project manager		
QA		
check		



2.General matters

2.1 area of application

2.4G/5.8G WIFI antenna

2.2 Operating temperature range

The temperature range of this product is -20 ~ +65°C

2.3 Preservation temperature range

This product is stored at -30 ~ +75°C

3.General product specifications

NO.	ITEMS	DETAILS
one	type	2.4G-5.8G WIFI
2	frequency band	2400-2500MHZ 5100-5900MHZ
three	VSWR	≤ 2.0
four	Gain	2.0dBi
five	Radiation Efficiency	$\geq 50\%$
six	impedance	50Ω
seven	Antenna type	dipole
eight	Antenna realization form	FPC+1.13 coaxial line
nine	Antenna picture	



4.Product specification details

4.1 Product structure parameters

4.11 Product material composition:

serial number	material	Specification (MM)
one	FPC	36.54*8.64mm black
2	coaxial-line	1st generation terminal Ø1.13 100MM black

4.12 exterior

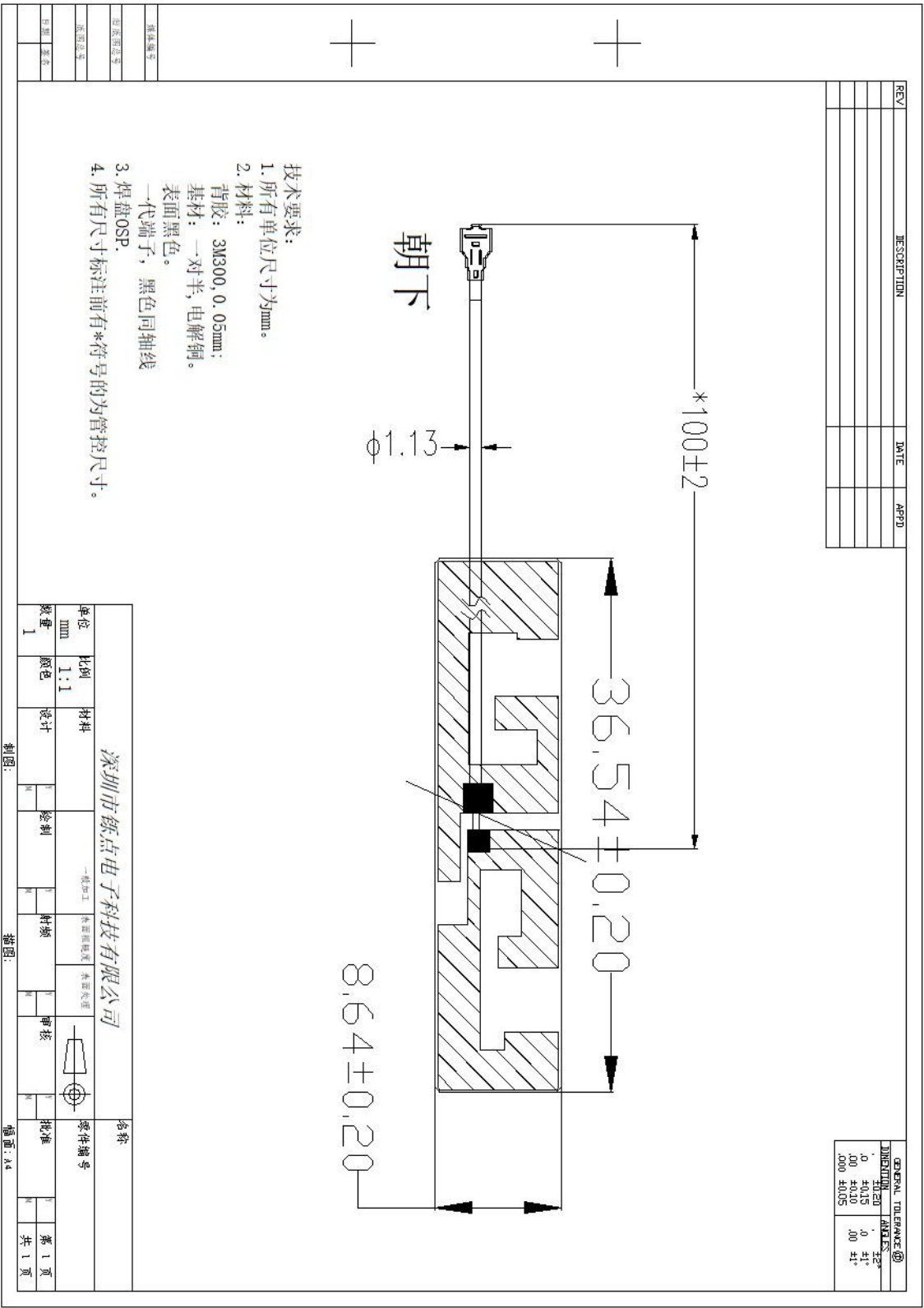
The product has a good appearance, and there are no scars, sweat marks, protrusions and other defects that seriously affect the appearance.

4.13 physical dimension

Refer to product drawings:



Product drawings:





4. 2 product electrical performance test data

4.21 Test environment and instruments and equipment

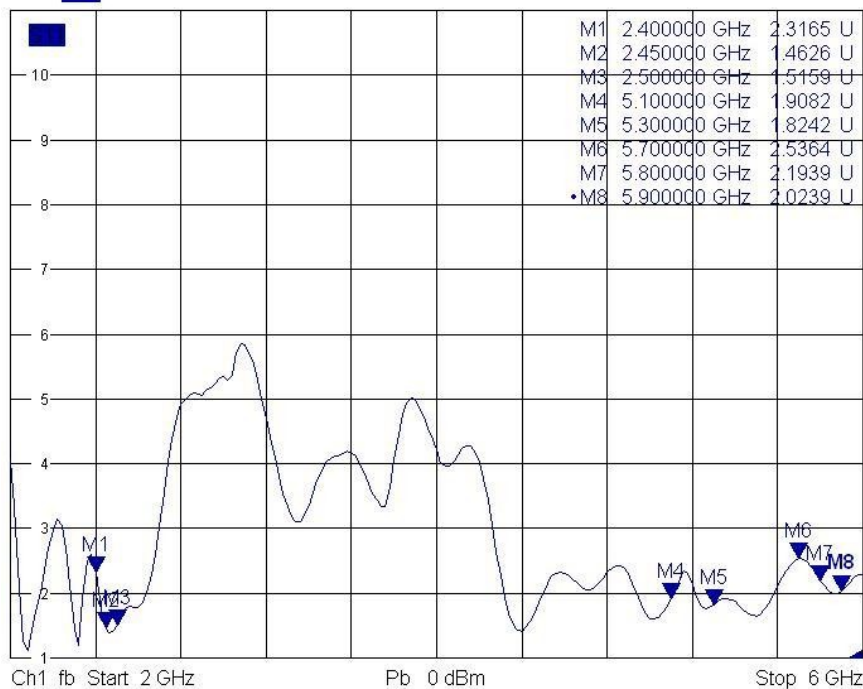
Test environment: Temper 10°C——+30°C Relative humidity: ≤80%(+40°C)	Test equipment: Network analyzer KEYSIGHT E5071C 24-probe microwave darkroom
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4.22.1 Product electrical performance test data:

S11 diagram of antenna:

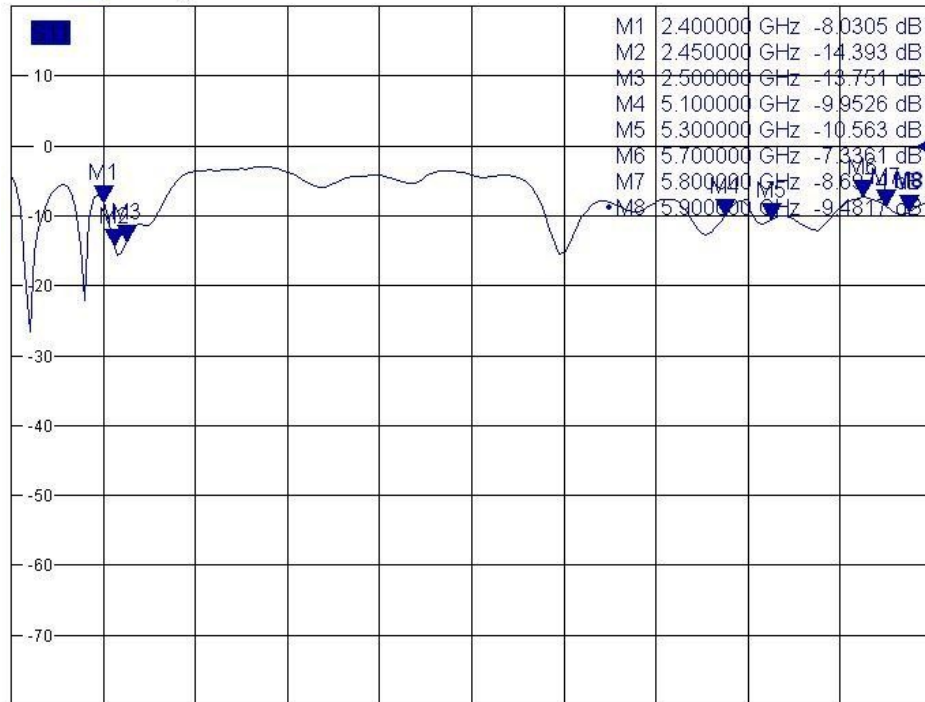
Marker	2400MH z	2450MH Z	2500MH z	5100MH z	5300MH Z	5700MH z	5800MH Z	5900MH z
Returnloss	-8.0	-14.3	-13.7	-9.9	-10.5	-7.3	-8.6	-9.4
VSWR	2.3	1.4	1.5	1.9	1.8	2.5	2.1	2.0

Trc1 S11 SWR: 1 U / Ref: 1 U





Trc1 S11 dB Mag 10 dB / Ref 0 dB

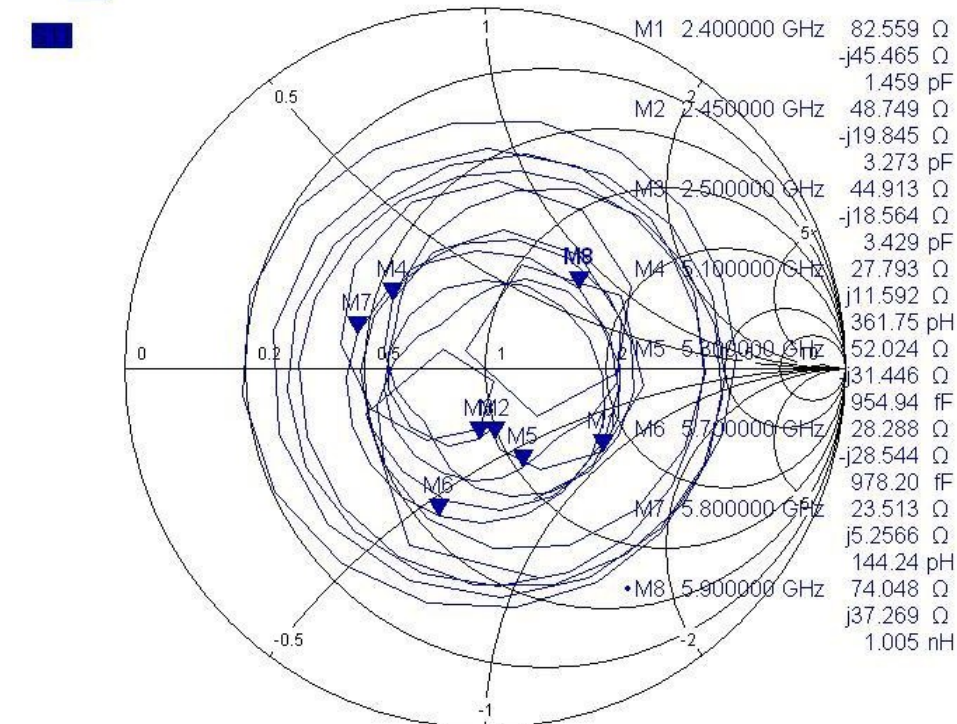


Ch1 fb Start 2 GHz

Pb 0 dBm

Stop 6 GHz

Trc1 S11 Smith Ref 1 U



Ch1 fb Start 2 GHz

Pb 0 dBm

Stop 6 GHz



5. Product packaging mode

Packing method:

Self-sealed bag, 200PCS each.

6. Document resume

File number Document No.	
date Release Date	2023/04/22
authorized strength Author	Hungjie
check Review	WH

List of previous documents

Revised History

Date	Version	Revised Record
2023/04/22	1.00	New Project