Antenna Data Sheet

for

AT.24GTX-AE2BT antenna

Customer No.

Product No.

SD652-AT.24GTX-AE2BT-FPC-200MM

Author：XiaofengZeng Review：Liming

Release Date： 2024.01.26

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1. Bilateral Confirmation page

1.1 Customer signature

Customer：

Separtment/post	Sign	Date
Hardware Engineer/RD		
Mechanical/MD		
Project Manager/PM		
Commercial/Puchasing		
Checker		

1.2 Signature of ShuoDian Technology company

Separtment/post	Sign	Date
Antenna Engineer/RD		
Mechanical/MD		
Project Manager/PM		
QA		
Checker		

2. General

2.1 Scope of application

This specification is only applicable to AT.24GTX-AE2BT antenna

2.2 Operating temperature range

Temperature range of this product: -20 ~ +65 ℃

2.3 Storage temperature range:

This product is stored at - 30 ~ + 75 ℃

3. General product specifications

NO.	ITEMS	DETAILS
1	Type	AT.24GTX-AE2BT antenna
2	Operating Frequency Band	2400-2500MHz
3	VSWR	≤2.0
4	Gain	1.0dBi
5	Impedance	50Ω
6	Antenna Type	**Monopole**
7	Antenna composition	FPC+CABLE
8	Entity Picture	

4. Specification Detials

4.1 Mechanical Properties

4.11 Product Composition：

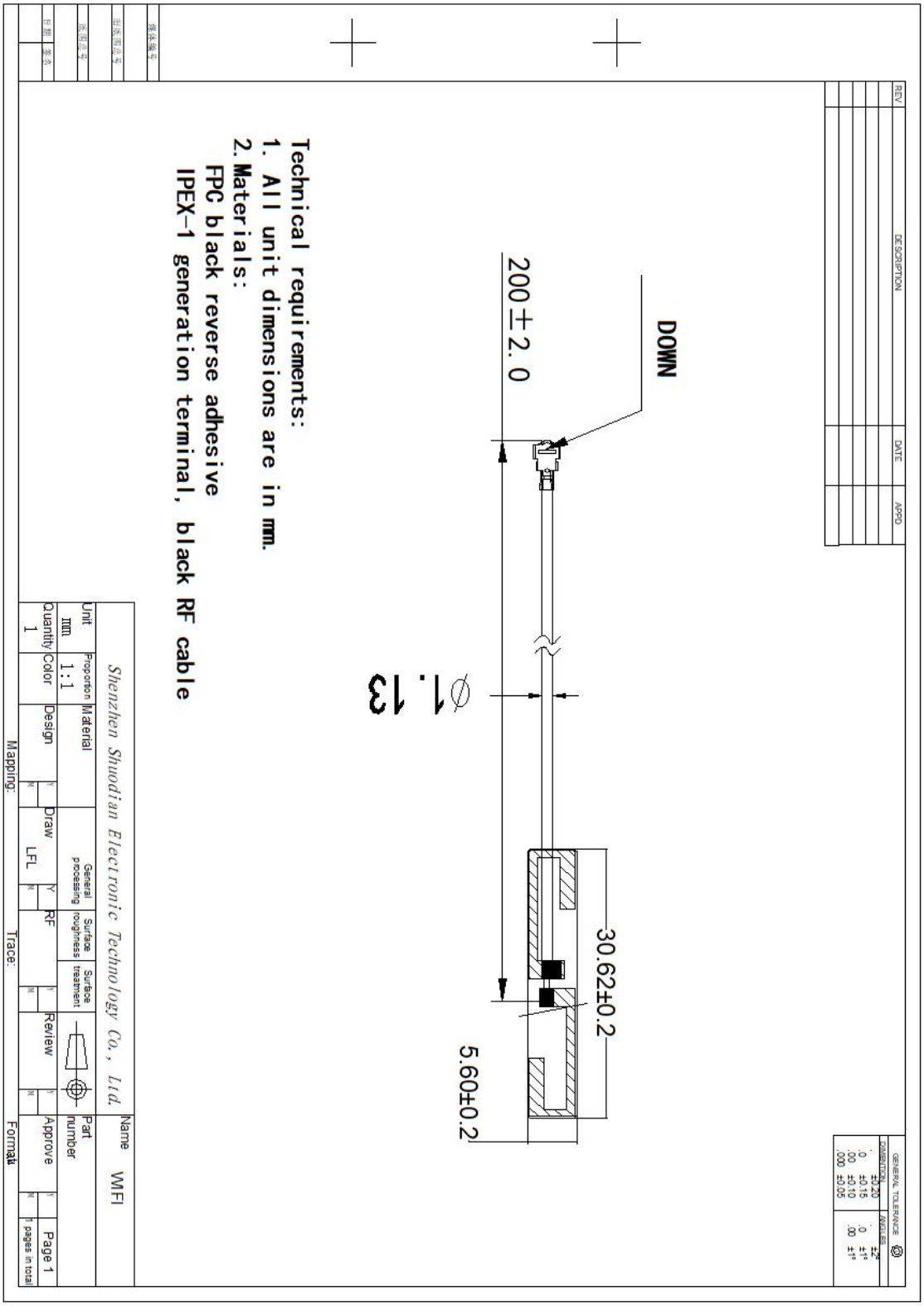
No.	Material	Size (MM)
1	FPC	30.62*5.6 Black
2	CABLE	IPEX-1 φ1.13 L=200 black

4.12 Apperance

Good appearance without scars 、dirts、protuberances, etc.

4.13 Antenna Picture and Structure Dimension

Productdrawings:


DOWN
200±2.0
Ø1.13
30.62±0.2
5.60±0.2
Technical requirements:
1. All unit dimensions are in mm.
2. Materials:
FPC black reverse adhesive
IPEX-1 generation terminal, black RF cable
Shenzhen Shuodian Electronic Technology Co., Ltd.
Unit mm
Proportion 1:1
Material
Quantity 1
Color
Design
Draw
LFL
RF
Review
Name WMFI
Part number
Approve
Page 1
1 pages in total
Mapping:
Trace:
Format

4. 2 Electric Performance

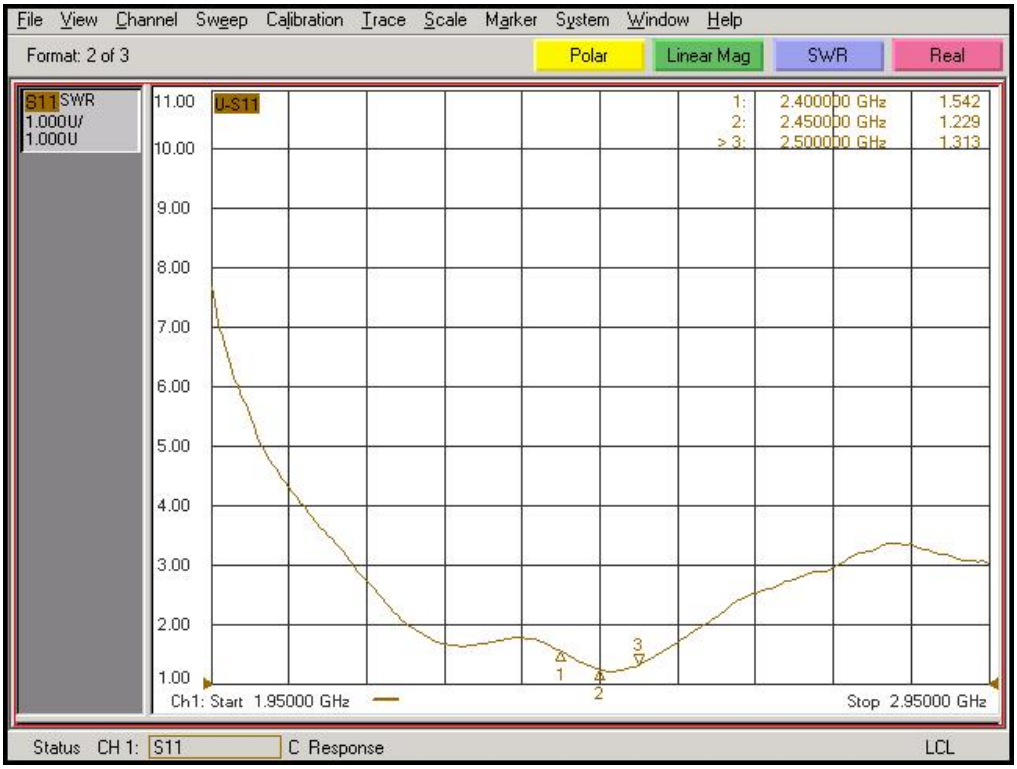
4. 21 Test condition

Environment:	Equipment:
Temperature: 10℃——+30℃	Network Analyzer: KEYSIGHT E5071C
Humidity: ≤80%（+40℃）	Multi-probe microwave anechoic chamber
Atmospher: 750mmkg±30mmkg	

4. 22 Test Data for Electrical Performance:

4.22.1 S11 of the Antenna:

Marker(MHZ)	2400	2450	2500
Returnloss	-13.2	-19.3	-17.0
VSWR	1.5	1.2	1.3

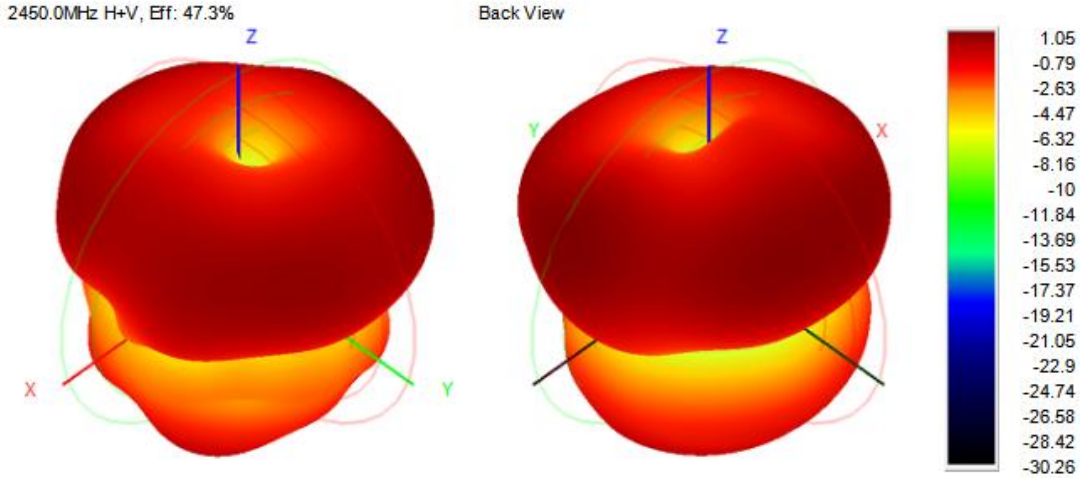


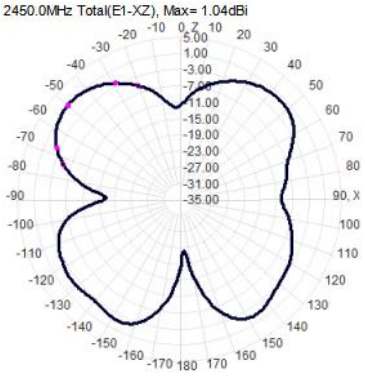
4. 22. 2 Passive gain、 efficiency and Radiation Pattern:

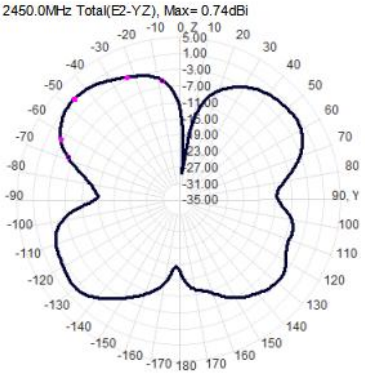
Frequency（MHz）	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain（dBi）	0.51	0.63	0.75	0.89	1.03	1.05	1.25	1.12	1.07	1.02	0.74
Efficient（%）	38.88	38.11	40.70	42.33	46.34	47.29	49.21	44.52	41.31	39.31	38.46

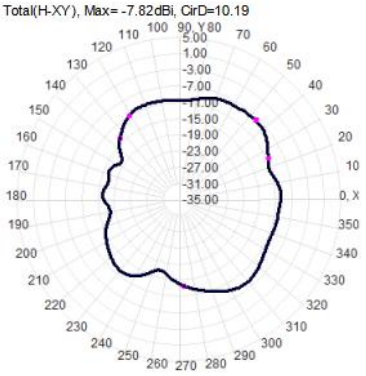
Radiation Pattern 2450MHz

@2450MHz









5. Product Packaging

Manner of packing**:**

Packed in self sealed bags, 200 pcs each.

6. Document Resume

Document No.	
Release Date	2024/01/26
Author	XiofengZeng
Review	LiMing

Revised History

Date	Version	Revised Record
2024/01/26	1.00	New Project