

SOLUM CO., LTD. 귀중

## APPROVAL SHEET (승인원)

Date	2023.12.19
Part Name	3.03.1001003947
Customer Code	ML39A040024A
Description	2.4/5.8G PCB Antenna with IPEX, RF1.13 Gray Cable, L=212mm
ETC	Lead & Halogen Free PRODUCT

승인 유효기간	승인일로부터 단종, 대체 부품 승인시까지
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구분	심사	입안	결정
협력업체			
	구매팀장	기술팀장	대표이사
	오수한	박준영	최현영

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주소	서울시 강서구 양천로 401 강서한강자이타워 A동 307호		

**Specification for Approval**

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YNOT Co., Ltd (Solu-m)

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Customer:

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2.4/5.8G PCB Antenna with IPEX, RF1.13 Gray Cable, L=212mm

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Part name

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3.03.1001003947 (reserved)

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Part No.

:

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Customer Part No.

Customer Approval		
APPROVAL	CHIEF	SUPERVISOR

Manufacturer Recognition			
SALES	CHECK	CHIEF	DESIGN
<i>Effy</i>	<i>Mr. Li</i>	<i>Jerry</i>	<i>Ms. Zheng</i>
Date:2023-10-20		Date:2023-10-20	
THANKS FOR OFFERING US THE OPPORTUNITY TO SEND SAMPLES FOR APPROVEMENT. PLS KINDLY SIGN BACK THIS DOCUMENT TO US WHEN SAMPLES ARE APPROVED.			

**FEIYUXIN HEADQUARTER**

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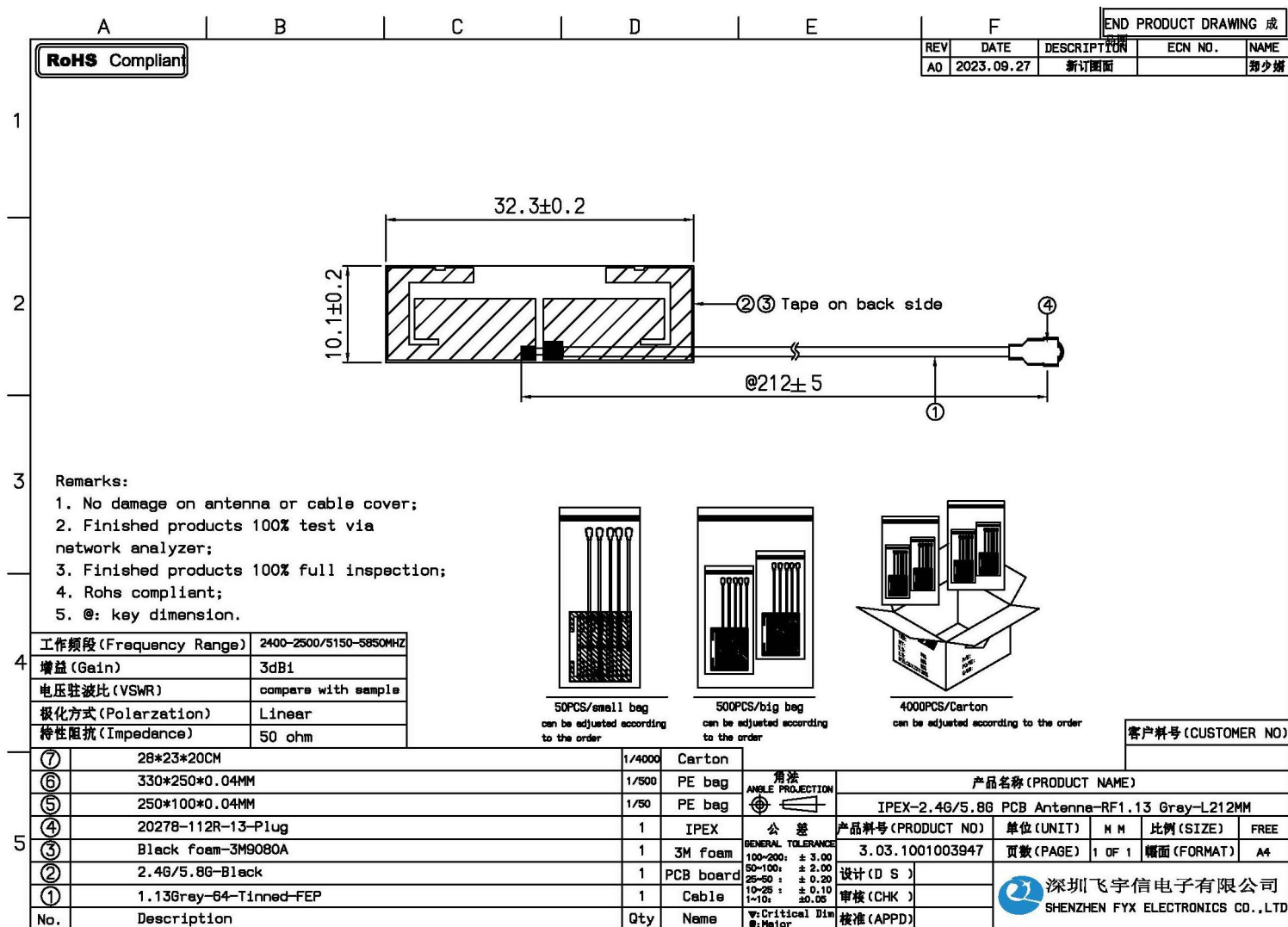
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## Modification Record

Revision	Date	Engineer	Modified Content
01	2023.10.20	Ms. Zheng	NEW

# Antenna Drawing



表单编号: FYX/E-QR-14A 版本: 第三版

## Product Specifications

### 1. Antenna Specs

Product Name: 2.4/5.8G PCB Antenna with RF1.13 Gray Cable	
DESCRIPTION	VALUE
Frequency range	2400-2500/5150~5850MHz
Impedance	50Ω
V.S.W.R	Compare with sample
Gain	3dBi
Radiation	Omni-directional
Radiating element	1/4 Wave Helical
Polarization	linear Vertical
Admitted power	5W
Connector	IPEX/U.FL
Cable type	RF1.13
Operating temp	-40℃~+70℃
Storage temp	-45℃~+75℃



## 2. Cable Specs

### 1.13 Structure



Item	Material	OD(mm)
1. Inner conductor	Tinned copper wire	7/0.08±0.02
2. Insulator	PE	0.66±0.02
3. Outer conductor	Tinned copper wire	0.88±0.05
4. Jacket	FEP	1.13±0.05

### Electrical performance

Capacitance(pF/m)	96±3
Impedance(ohm)	50
Rate(%)	66
Bending radius (mm)	≤7
Maximum operating voltage (VMS)	1000
Maximum operating frequency (MHz)	6000
Operating temperature range (°C)	-40 TO +80

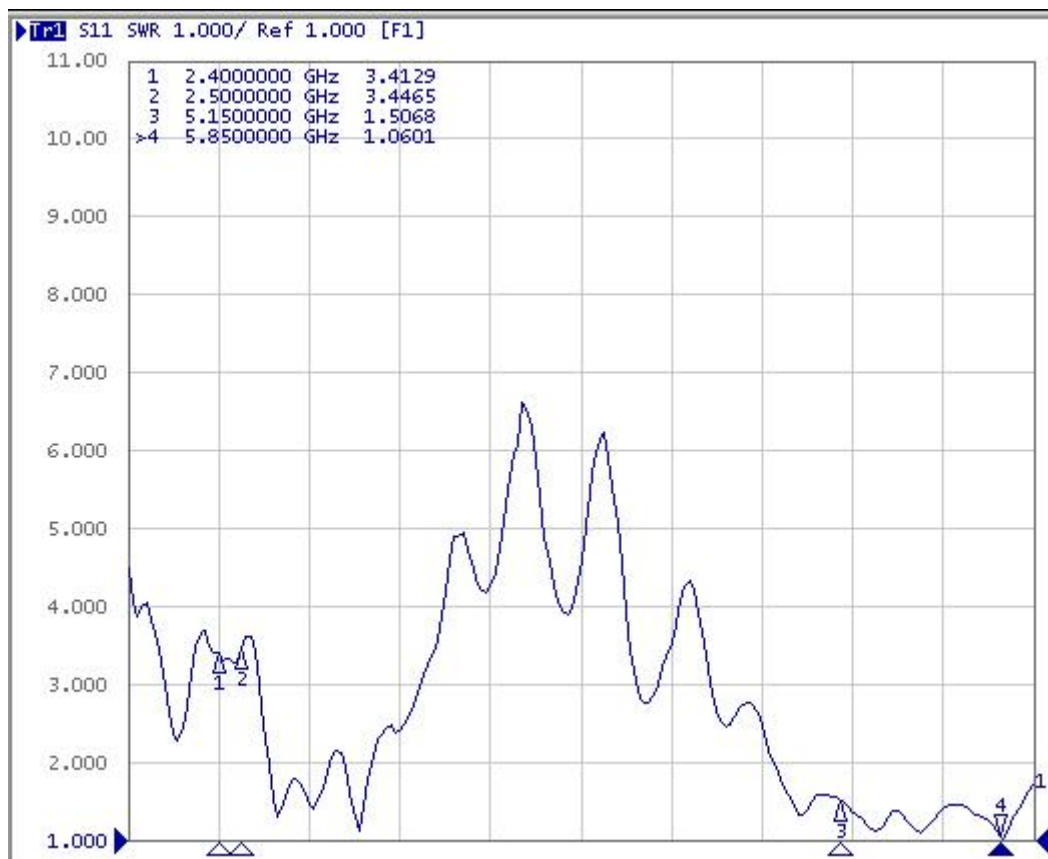
### Attenuation (typical)

Frequency MHz	Attenuation ( dB/m)
100	0.42
400	0.58
1000	2.20
2000	3.40
3000	4.20
4000	4.50
5000	5.20
6000	5.60

# Test Report

(Empty test without customer's device)

## 1. VSWR Test



## 2. Efficiency and Gain Test

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)
2400	56.08	-2.51	3.59	1.44
2410	52.47	-2.8	3.08	0.93
2420	47.27	-3.25	2.37	0.22
2430	47.83	-3.2	2.57	0.42
2440	47.09	-3.27	2.35	0.2
2450	51.95	-2.84	2.72	0.57
2460	52.99	-2.76	2.96	0.81
2470	46.17	-3.36	2.16	0.01
2480	49.42	-3.06	2.86	0.71
2490	43.37	-3.63	1.79	-0.36
2500	44.11	-3.55	2.12	-0.03

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)
5150	75.15	-1.24	2.8	0.65
5220	56.1	-2.51	1.84	-0.31
5290	60.66	-2.17	1.52	-0.63
5360	76.42	-1.17	2.94	0.79
5430	94.7	-0.24	4.47	2.32
5500	81.71	-0.88	2.83	0.68
5570	83.32	-0.79	2.75	0.6
5640	63.53	-1.97	2.3	0.15
5710	72.77	-1.38	3.61	1.46
5780	72.95	-1.37	3.04	0.89
5850	54.23	-2.66	1.73	-0.42

**Packing Information** (Box & Label size format)

Carton Size: 28x23x20 cm

Label format as below

<b>Customer: Y-NOT</b>	
<b>PO:</b>	
<b>P/N:</b>	
<b>Description:</b>	
<b>Q'ty:</b>	<b>pcs</b>
<b>Date:</b>	



飞宇信

## QC

PCB

QC

FYX/O-WI-1-0234

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2023-8-22

Engineering Task				Control						Test Instrument	Record	Risk assessment
Control	Flow chart	Task	Standard OP	Item	Specification	Sampling / Testing	Responsibility		Inspection point			
1												
2						, AQL MIL-STD-105E GENEAL INSPECTION LEVEL  AQL: MAJOR 0.4 MINOR 1.5 CR 0	IQC		1 \                      \ \                      \ 2 Connector                      PIN  3.  4			
3								27  70%				

Remark	Flow chart symbol "	"-Connection, "	"- Inspection, "	"- Operation, "	"- Transfer, "	"- Document, "	"- Storage "
Approved By:				Check By			Prepared By





# QC

/ PCB QC

FYX/Q-WI-1-0234

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2023-8-22

Engineering Task				Control						Test Instrument	Record	Risk assessment
Control	Flow chart	Task	Standard OP	Item	Specification	Sampling / Testing	Responsibility		Inspection point			
4				/								BOM
5						/	/IPQC				IPQC	
6						/	/IPQC				IPQC	
7						/	/IPQC				IPQC	

Remark

Flow chart symbol "

"-Connection, "

"- Inspection, "

"- Operation, "

"- Transfer, "

"- Document, "

"- Storage

Approved By:

Check By

Prepared By





# QC

/ PCB QC

FYX/Q-WI-1-0234

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2023-8-22

Engineering Task				Control						Test Instrument	Record	Risk assessment
Control	Flow chart	Task	Standard OP	Item	Specification	Sampling / Testing	Responsibility		Inspection point			
8		PCB				/	/IPQC		:420 -450		IPQC	/
9						/	/IPQC		---		IPQC	
10						/	/IPQC		---		IPQC /	
11							FQC		PCB			

Remark Flow chart symbol " " -Connection, " " - Inspection, " " - Operation, " " - Transfer, " " - Document, " " - Storage  
 Approved By: Check By Prepared By



# QC

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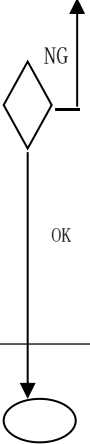

PCB

QC

FYX/Q-WI-1-0234

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2023-8-22


Engineering Task				Control						Test Instrument	Record	Risk assessment
Control	Flow chart	Task	Standard OP	Item	Specification	Sampling / Testing	Responsibility		Inspection point			
12	<div> <div>ok</div>  </div>		OQC			<div>,</div> <div>MIL-STD-105E</div> <div>AQL: MAJOR</div> <div>0.4</div> <div>MINOR 1.5</div> <div>CR 0</div>	OQC	---	, , , ,	/	OQC	
13								—				


Remark

Flow chart symbol "

"-Connection, "

"- Inspection, "

"- Operation, 

"- Transfer, 

"- Document, "

"- Storage

Approved By:

Check By

Prepared By