

# Shenzhen Kinghelm Electronics Co., Ltd.

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## Specifications For Approval

Customer: \_\_\_\_\_

Customer P/N: \_\_\_\_\_

Product Name: SMA (ZJ) -2.4G Sucker Antenna-174 Black-L3M

Model: KH-2400-3M-XP

Specifications: \_\_\_\_\_

Date: \_\_\_\_\_

Company P/N: \_\_\_\_\_

Customer Approval		
Confirmed	Checked	Approved

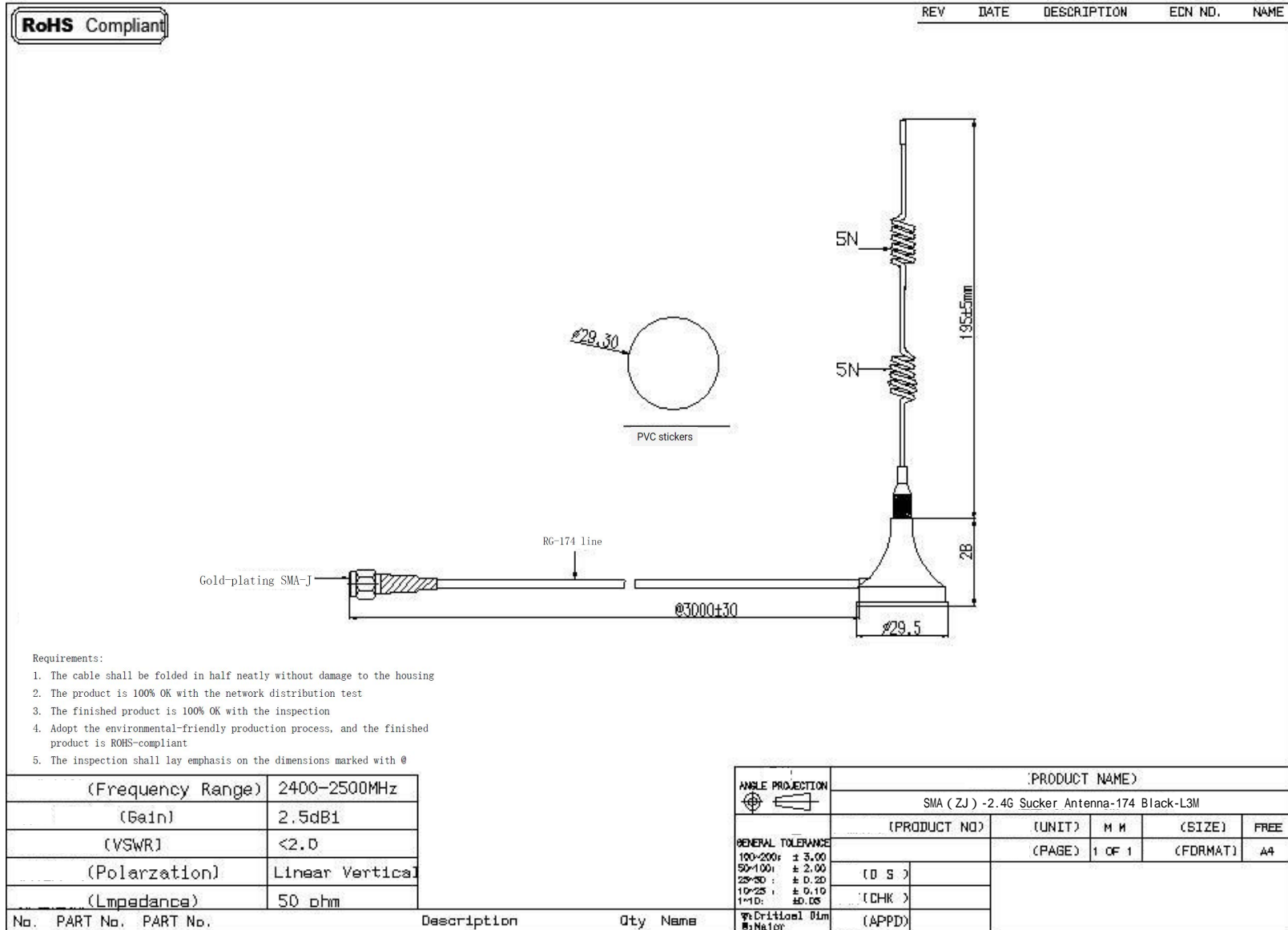
Manufacture Approval			
Sales Representative	Prepared	Checked	Approval

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History of Revisions			
Edition	Revision	Engineer	Date
A0	New		

## 3. Appearance dimensions



#### 4. Appearance Overview

Appearance Dimension	Ø29.5*223mm	Mounting	Magnetic installation
Weight	/	Connector Model	Gold-plating SMA-J
Colour of Housing	Black	Cable	RG-174 line

#### 5. Antenna Properties Parameters

ITEM	Characteristics	Unit
Frequency Range	2400~2500	MHz
Output Impedance	50	Ω
SWR	≤2.0	---
Gain	≥2.5	dBi
Polarization	Vertical	
Radiation	Omnidirectional	
Max Power input	5	W
Working Temp	-40~+70	°C
Storage Temp	-45~+75	°C

#### 6. Connector Specifications

Serial Number	Part Name	Material	Plating	Remarks
1	Inner Conductor	Brass	Gold-plating	
2	Insulator	PTFE		
3	Housing	Brass	Gold-plating	

#### Electrical Properties

Serial Number	Test Item	Technical Criteria	Remarks
1	Characteristic Impedance	50 Ω	
2	Temp Range	-55~+155°C	
3	Frequency Range	0~3GHZ	
4	Dielectric Strength	1000V (rms)	
5	Contact Resistance	Inner Conductor ≤3mΩ Outer Conductor ≤2mΩ	
6	Insulation Resistance	≥5000MΩ	
7	VSWRL	≤1.25 (soft cable)	

7. Environmental Test

Environmental Test Report

P/N			Designation	
Test Item	High-low temperature test, humidity test			
Test Equipment	Humidity Chamber	Sample Size		
Test Standard	1. The plating on the metal surface shall be free of defects such as falling off, cracks and wrinkles; non-metallic parts shall be free of discoloration, cracks, deformation, degumming etc.			
Test Name	Test Item	Criteria	Test Mode	Result
High Temperature Test	Temperature (°C)	75±3	a) Put the tested part into the test chamber, and then adjust the temperature to 75 °C ± 3 °C, and monitor the time. b) After the test, place it at room temperature for 1 hour for routine inspection.	Acceptable
	Time to test sample temperature (h)	1		
	Test duration (h)	2		
	Recovery time (h)	1		
Low Temperature Test	Temperature (°C)	-40±3	a) Put the tested part into the test chamber, and then adjust the temperature to -40 °C ± 3 °C, and monitor the time. b) After the test, place it at room temperature for 1 hour for routine inspection.	Acceptable
	Time to test sample temperature (h)	1		
	Test duration (h)	2		
	Recovery time (h)	1		
Humidity Test	Temperature (°C)	+40±3	Put the tested part into the test chamber, and then adjust the temperature and humidity of the test chamber to + 40 °C ± 3 °C and 90-95% respectively, and monitor the time. b) After the test, place it at room temperature for 1 hour for routine inspection.	Acceptable
	Relative humidity (%)	90-95		
	Test duration (h)	21		
	recovery time (h)	1		
Test Item	Free Fall Test			
Test Equipment	Desktop with height of 1m	Sample Size		
Test Standard	1. If the product is falls at a height of 1m, it shall be free from falling off, cracks, defects, and appearance deformation etc.			
Test Name	Test Item	Criteria	Test Mode	Result
Free Fall Test	Dropping height 1000mm	Drop 2 times from both sides	Step: a) Drop the tested part at a height of 1000mm and conduct routine inspection after the test.	Acceptable

Test Item	Salt Spray Test			
Test Equipment	Salt spray testing machine	Sample Size		
Test Standard	1. The plating on the metal surface shall not falls off; the appearance shall be free of rust, corrosion, oxidation etc.			
Test Name	Test Item	Criteria	Test Mode	Result
Salt Spray Test	1. NaCl concentration: 2. Air pressure: 3. PH value: 4. spray amount: 5. Temperature of brine test Setting a. Laboratory temperature: b. Pressure tank temperature: 6. Time:	40-60g/1kg 1.0±0.01kgf m <sup>2</sup> 6.5-7.2 1.0-2.0ml/80c/h.	Steps: a) Set the salt spray testing machine to the relevant test conditions. b) Put the tested part into the salt spray testing machine for 24 hours. After the test, rinse it with clean water, visually inspect the appearance of the tested part and conduct routine inspection.	Acceptable
	a. Laboratory temperature: b. Pressure tank temperature: 6. Time:	35±1°C 47±1°C 24H	After the test, rinse it with clean water, visually inspect the appearance of the tested part and conduct routine inspection.	
Inspector:	Checked:		Approved:	

8. Product Image

