

Shenzhen Kinghelm Electronics Co., Ltd"

Model:KH-2400-2M-XP							
Product Name:				2.4G Suc	ker Ar	ntenna	a
Specification: SMA (ZJ) -2.4G Sucker Antenna 174-Cable 2m							
ompany	/ P/N:						
			Appro	oval Signatur	re		
Ma	anufact	ture A	pproval		Custom	er con	firmation
ngineer	Chec	cked	Approved	Engineer	Ched	cked	Approved
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Date		Dec.	28, 2020	CHOP&SIGNAT Date	TURES		
Date		Dec.	28, 2020	Date		: Acce	ept □YES □NO



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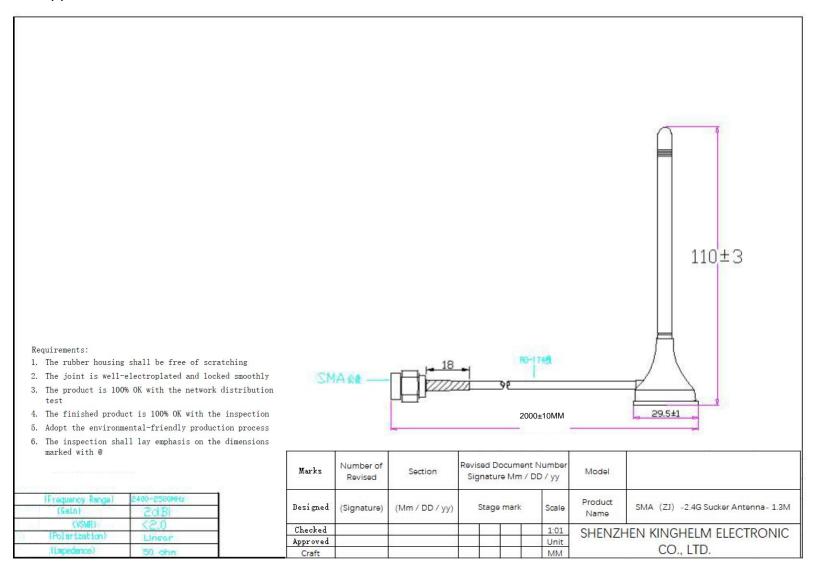
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	History of Revisi	ion	
Edition	Revision	Engineer	Date
AO	New	Zhan	12. 28. 2020

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3. Appearance Dimensions





4. Mechanical Parameters

Appearance Dimension	Ø29. 5*110mm	Mounting	Magnetic installation
Weight	/	Connector Model	Gold-plating SMA-J
Colour of Housing	Black	Cable	RG-174 Cable-3m

5. Antenna Properties Parameters

ITEM	Characteristics	Unit
Frequency Range	2400~2500	MHz
Output Impedance	50	Ω
SWR	≤ 2.0	——
Gain	≥2	dBi
Polarization	Vertical	
Radiation	Omnidirectional	
Max Power input	10	W
Working Temp	-40~+80	$^{\circ}$ C
Storage Temp	-45∼+55	$^{\circ}$

6. Connector specifications Material and Plating

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	Testing Item	Technical Criteria	Remarks
1	Characteristic	50 Ω	
1	Impedance	JU \$2	
2	Temp Range	-55∼+155°C	
3	Frequency Range	0~3GHZ	
4	Dielectric Strength	1000V (rms)	
5	Contact Designations	Inner Conductor≤3mΩ	
5	Contact Resistance	Outer Conductor≤2mΩ	
6	Insulation Resistance	\geqslant 5000M Ω	
7	VSWRL	≤1.25(soft cable)	

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7. Cable Specifications

Cable Specifications		
RG 174	THE WATER WATER TO THE PARTY OF	
0/2		
		/
Structure parameters		
Part Name	Material	Diameter (mm)
1. Inner Conductor	Bare Copper Wire	7/0.16
2. Insulator	PE	1.50 ± 0.05
3. Outer Conductor	Copper-clad aluminum (64 volumes)	64/0.12
4. Sheath	Black PVC	2.80 ± 0.1
Electric properties Pa	rameters	
Capacitance (pF/m)		101.05
Impedance (ohm)		50
Rate (%)		66
Bending radius (mm)		10
Max working voltage (V	MS)	1500
Max frequency (MHz)		3000
Working temp (°C)		-40 to +85
Percentage of elongation of b	raided filament (%)	≥10
Pulling force of finish	hed cable (N)	≦140
Jamming signal masking rate	of finished cable (%)	≥95
	Attenuation	
_	ency (MHz)	Attenuation (\Rightarrow dB/m)
	00	0. 276
	000	0. 558 0. 899
	000	1.530
	000	2. 165
	<u>I</u>	

8. Environmental Test

Product Name	4G Sucker Antenna				
Test Item	High-low temperature test, humidity test				
Test Equipment	Humidity Chamber Sample size 3				
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) Time to test temperature (h) Test duration (h)	85±3 1 24	Steps: a) Put the tested the test chamber, adjust the tempera 85 °C ± 3 °C, and the time.	and then ature to	Acceptable

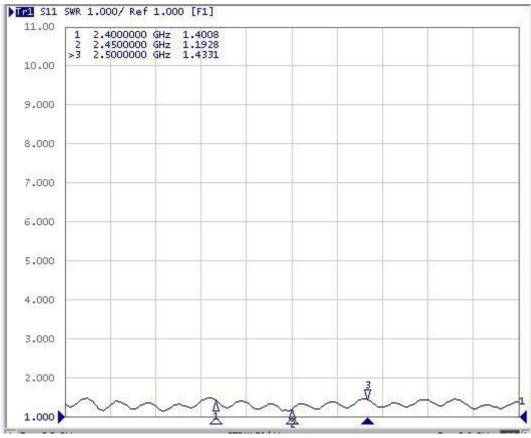


	Recovery time (h)	1		fter the test, place it at	
				temperature for 1 hour for	
				ine inspection.	
Low	Temperature (℃)	-45 ± 3	Steps		Acceptable
-	Time to test	1		it the tested part into the	
Test	temperature (h) Test			chamber, and then adjust the	
	duration (h)	24	_	erature to -40 $^{\circ}\mathrm{C}\pm$ 3 $^{\circ}\mathrm{C}$, as	nd
		1		tor the time.	
				fter the test, place it at	
				temperature for 1 hour for	
	(10)	40.1.0		ine inspection.	
Humidity -	Temperature (℃)	$+40 \pm 3$		the tested part into the tes	stAcceptable
Test	Relative humidity (%)	90-95		per, and then adjust the	
	Test duration (h)	24	_	erature and humidity of the	
	recovery time (h)	1		chamber to + 40 ℃± 3 ℃	
				90-95% respectively, and	
				tor the time.	
				fter the test, place it at	
				temperature for 1 hour for	
7	D D 11 M		rout	ine inspection.	
Test Item	Free Fall Test	0.1	1	0 1 0:	
Test Equipment	Desktop with height of	f 1m		Sample Size 3	
Test	1. If the product is f	falls at a h	neight	of 1m, it shall be free fr	om falling
Standard	off, cracks, defects,	and appeara	nce d	eformation etc.	
Test Name	Test Item	Criteria	Test	mode	Result
Free Fall	Dropping height	Drop 2	Step	:	
Test	1000mm	times from	a) Di	rop the tested part at a he	ig Acceptable
		both sides	of 10	000mm and conduct routine	
			inspe	ection after the test.	
Test Item	Salt Spray Test				
Test	Salt spray testing mad	chine		Sample Size 3	
Equipment					
Test	1. The plating on the	metal surfa	ice sh	all not falls off; the appe	earance shall
Standard	be free of rust, corre	osion, oxida	ation	etc.	
Test Name	Test Item	Criteria		Test Mode	Result
Salt Spray	1. NaCl	40-60g/1kg		Steps:	Acceptable
Test	concentration:	1.0 ± 0.01 kg	gf m²	a) Set the salt spray	
	2. Air pressure:	6.5-7.2		testing machine to the	
	3. PH value:	1.0-		relevant test conditions.	
	4. spray amount:	2.0m1/80c/h	۱.	b) Put the tested part int	О
	5. Temperature of			the salt spray testing	
	brine test Setting	35±1℃		machine for 24 hours. Afte	r
	a. Laboratory	47±1℃		the test, rinse it with	
	temperature:	12H		clean water, visually	
	b. Pressure tank			inspect the appearance of	
	temperature:			the tested part and conduc	t
	6. Time:			routine inspection.	
Inspector:		Checked	l:	Approved:	
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9. Properties Test Chart



10. Product Image

