



Shenzhen Kinghelm Electronics Co., Ltd

Specification For Approval

Customer Name: _____

Customer P/N: KH-SMA(ZJ)-4G-L1M

Specification: SMA(ZJ)-4G Explosion Proof Antennae-L1M

Part Number: _____

Date: _____

Customer Confirmation		
Checked	Auditor	Approved

Manufacturer Acknowledgement			
Sales Representative	Checked	Auditor	Approved

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Modification Record			
Edition	Contents Of Modification	Engineer	Date
A0	New Construction		

3. Product Dimension

KH-SMA $\text{Ø}1000 \pm 30\text{mm}$ 95 ± 3
 80 ± 3

Request:

- 1.The rubber jacket must be free from scratches or defects
- 2.The connector plating is in good condition, ensuring smooth locking
- 3.100% of the products passed the network separation test
- 4.All finished products passed 100% inspection
- 5.Using environmentally friendly processes
- 6.Emphasize controlling dimensions marked with @

				Scale	Product Name	KH-SMA(ZJ)-4G-L1M	
				1:1			
				Unit			
				mm			

4. Product Appearance

Dimension	95mm	Mounting Method	Spiral Fixation
Weight	≤ 6.5 g	Connector Model	SMA Male Connector
Shell Color	Black	Cable	174 Cable

5. Performance Parameters

Item	Characteristics	Unit
Frequency Range	824-960/1710-2690	MHz
Output Impedance	50	Ω
V.S.W.R.	< 2.5	
Gain	≥ 1	dBi
Polarization Mode	Vertical Polarization	
Radiation Pattern	Omnidirectional	
Maximum Input Power	5	W
Operating Temperature	-45 ~ +80	°C
Storage Temperature	-45 ~ +85	°C

6. Connector Specification

6.1 Material And Plating

No.	Part Name	Material	Coating	Remark
1	Inner Conductor	Brass	Gold Plating	
2	Insulator	PTFE		
3	Shell	Brass	Nickel Plating	

6.2 Electrical Performance

No.	Test Items	Specifications	Remark
1	Characteristic Impedance	50 Ω	
2	Temperature Range	-55 ~ +155 °C	
3	Frequency Range	0 ~ 3 GHz	
4	Dielectric Strength	1000 V(rms)	
5	Contact Resistance	Inner Conductor ≤ 3 mΩ Outer Conductor ≤ 2 mΩ	
6	Insulation Resistance	≥ 5000 MΩ	
7	V.S.W.R.	≤ 1.25 (Flexible Cable)	

7. Environmental Tests

Environmental Test Report

P/N	Specification			
Pilot Project	High Temperature, Low Temperature, Constant Humidity Test			
Test Equipment	Constant Temperature And Humidity Test Chamber	Number Of Tests		
Test Standard	Metal surface plating without peeling, cracks, wrinkles and other defects; Non-metallic parts can not have discolouration, cracks, deformation, degumming and other phenomena.			
Test Name	Pilot Project	Request	Test Method	Results
High Temperature Test	Temperature (°C)		Test Procedure: a) Put the test piece into the test chamber, and then adjust the temperature of the high temperature chamber to 75°C±3°C, and monitor the time. b) After the test, leave it at room temperature for 1 hour for routine inspection.	Qualified
	Test Sample	85±3		
	Temperature	1		
	Stabilization Time (h)	2		
	Test Duration (h)	1		
Low Temperature Test	Temperature (°C)		Test Procedure: a) Put the test piece into the test box, and then adjust the temperature of the low temperature box to 40°C±3°C, and monitor the time. b) After the test, leave it at room temperature for 1 hour for routine inspection.	Qualified
	Test Sample	-45±3		
	Temperature	1		
	Stabilization Time (h)	2		
	Test Duration (h)	1		
Constant Damp Heat Test	Temperature (°C)	+40±3	Test Procedure: a) Put the test piece into the test chamber, and then set the temperature of the test chamber to +40°C±3°C, the humidity is 90-95%, and monitor the time. b) After the test, leave the test chamber at room temperature for 1 hour for routine inspection.	Qualified
	Relative Humidity (%)	90-95		
	Test Duration (h)	21		
	Recovery Time (h)	1		
Pilot Project	Free Drop Test			

Test Equipment	1 Metre High Tabletop		Number Of Tests	
Test Standard	In 1 metre high drop, the product does not fall off, cracks, and other defects, the appearance of no deformation and other phenomena.			
Test Name	Pilot Project	Request	Test Method	Results
Free Drop Test	Drop Height 1000mm	Drop 2 Times On Both Sides	Test Procedure: a) Drop the test piece at a height of 1000mm and carry out the usual inspection after the test.	Qualified
Pilot Project	Fog Test			
Test Equipment	Mist Test Machine		Number Of Tests	
Test Standard	The metal surface plating is not peeling off; the appearance of no rust, corrosion, oxidation and other undesirable phenomena.			
Test Name	Pilot Project	Request	Test Method	Results
Salt Mist Test	1.NaCl Concentration: 2.Air Pressure: 3.PH Value: 4.Spray Volume: 5. Salt Water Test Temperature Setting a. Test Chamber Temperature: b.Pressure Drum Temperature: 6. Test Time:	40-60g/1kg 1.0±0.01kgf m2 6.5-7.2 1.0-2.0ml/80c/h 35±1°C 47±1°C 24H	Test Procedure: Adjust the salt spray tester to the relevant test conditions. b)Place the DUT in the salt spray tester and leave it for 24 hours. After the test, rinse with clean water, visually inspect the test piece, and perform a routine inspection.	Qualified
Inspector:	Auditor:		Approved:	