

# Shenzhen Kinghelm Electronics Co., Ltd

## 868MHZ(2dBi) Antenna

### Specification Of Approval

Customer		Frequency Band	868MHz
Product Name	858MHZ 2dBi Antenna	Rev	A1
Customer P/N		KH P/N	KH-(868)-J505-JB
RF Design		RF Manager	
Structural Design		Structural Manager	
Technical Director		Date	2023-2-15

Customer Approval:

Assembly compliance with your company's requirements: OK NG

**Confidentiality Requirements**

Our company possesses proprietary information provided by proprietary technology. This proprietary information must be kept confidential and may not be disclosed to any individual or company without prior written consent from the company.

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## 1. Product Images:



## 2. Product Parameters

Product Testing Parameters			
Name	2dbi Rubber Ducky Antenna	Model Type	Khb-868Ant
Electrical Specifications			
Frequency Range	868Mhz	Polarization	® Vertical
Impedance	50 Ω	Radiation Direction	Omni-Directional
VSWR	≤ 2.0	Power	50 W
Gain	2dbi	Bandwidth	/
Mechanical Specifications			
Dimensions	108 ± 2mm	Radome Color	Black
Connector	SMA	Cable Length	/
Radome Material	ABS/TPEE		
Working Temperature	-40°C ~+85°C	Limit Temperature	-40°C ~+85°C

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## 3. VSWR , Returnloss , Smith Data



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## 4. Structural Drawing

**Requirements:**

1. Finished products must pass 100% continuity testing.
2. Finished products must pass 100% full inspection.
3. Products must be manufactured using environmentally friendly processes.
4. Compliant with RoHS requirements.  
Connector pull strength: 5 kg~
5. For dimensions not specified, general tolerances apply.

Rev	Date	Description	Name
A1			
A2			

  

Frequency Range	868 MHZ
Impedence	50 OHM
VSWR	< 1.92
Gain	20 dbi
Polarization	Vertical
Radiation	Omnidirectional

No.	Name	Description	QTY	Part No.
6	Material	178 brown-485-PTFE L-805mm	1	1301-0054
5	Rubber Jacket	6.5 Rubber - 2DIB Not Lead-Out	1	1203-0017
4	Rubber Grommet	6.5 Rubber 2DIB Out Grade	1	1201-0016
3	Rubber Seat	6.5 Rubber - 2DIB Out Wire	1	1201-0015
2	Hardware Parts	1.6 4.4*L23-White	1	1701-0065
1	SMA	6.5 Black Full Tin Small S Male Pin	1	1101-0111

品名规格 (PRODUCT NAME)	SMA (S)	橡胶密封-L108
料号 (PART NAME)	GDT030-0001	
零件号 (CDS PART NAME)		
制图 (DRAW)	NELR	版本 (REV)
审核 (CHECK)	CHEM	日期 (DATE)
批准 (APP.)	JERLR	页码 (PAGE)

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**5. Environmental Performance Test:**

Item	Test Conditions	Specification
Storage Environment	If not specified, the testing conditions for temperature, humidity, and air pressure are as follows: 1. Temperature: -30°C~+80°C 2. Relative Humidity: 45%-85% 3. Air Pressure: 86kpa-106kpa	Adequate electrical and mechanical performance
High-Low Temperature Test	Cycle between 70°C and 40°C five times, then leave under normal conditions for 1-2 hours, and inspect the appearance and quality	The dimensions should meet the specified requirements and comply with the mechanical and electrical performance
Constant Humidity And Heat Resistance Test	At a relative humidity of 95±3% and a test temperature of 40°C, maintain for 2 hours. Immediately after removal, within 5 minutes, measure the electrical performance of the sample. Leave the sample under normal conditions for 1-2 hours and inspect its appearance and quality	The dimensions should meet the specified requirements and comply with the mechanical and electrical performance
Vibration Test	Vibration Frequency Range: 10-55Hz, Displacement Amplitude: 0.35mm, Acceleration Amplitude: 50.0M/S, Number Of Frequency Sweeps: 30 Cycles	Adequate electrical and mechanical performance
Drop Test	Free fall from 1 meter height in mutually perpendicular axes direction for 3 times	Adequate electrical and mechanical performance