

东莞市亨松电子科技有限公司

hengxin Technology CO., LTD

Specification For Approval

Customer

Description

433MHz Antenna


ChaoWei P/N

HX-B513A-433M

Customer P/N

Date

2023. 11. 20

Customers Confirmation			Supplier	
Engineer	QC	Purchasing	Approval	Check
				Shamoer

TEL : 0769-81663533

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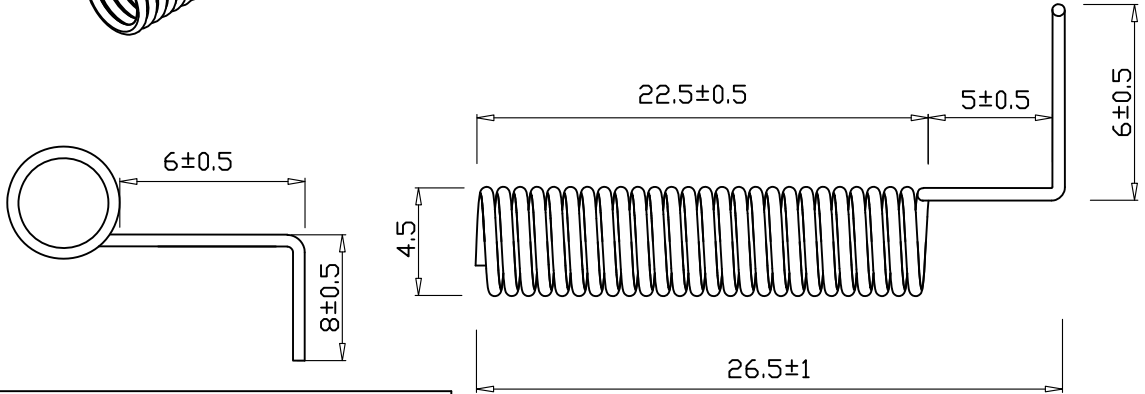
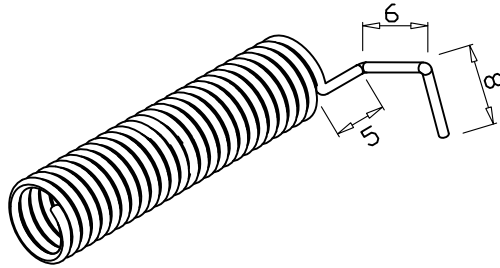
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RoHS

Compatible

date	reason	Identifying person
B		
C		
D		



Spring technical requirements

Tolerance:±

Spring material	Nickel plating with phosphor copper	Residual diameter	0.6mm
Direction of rotation	/	Number of effective turns of rotation	25.5T
Exit mode	unilateral	Pitch of holes	/
Upper spring dimension			
Lower spring dimension			
Spring height			

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PART NAME: 433MHz Antenna			DATE: 2023-05-25
PART NO.: HX-B513A			
APPROVED BY	CHECKED BY	DESIGNED BY	Tolerance X.X ±0.50 X.XX±0.15 X° ±3°
			UNITS: mm SCALE: 1/1 REVISION: A

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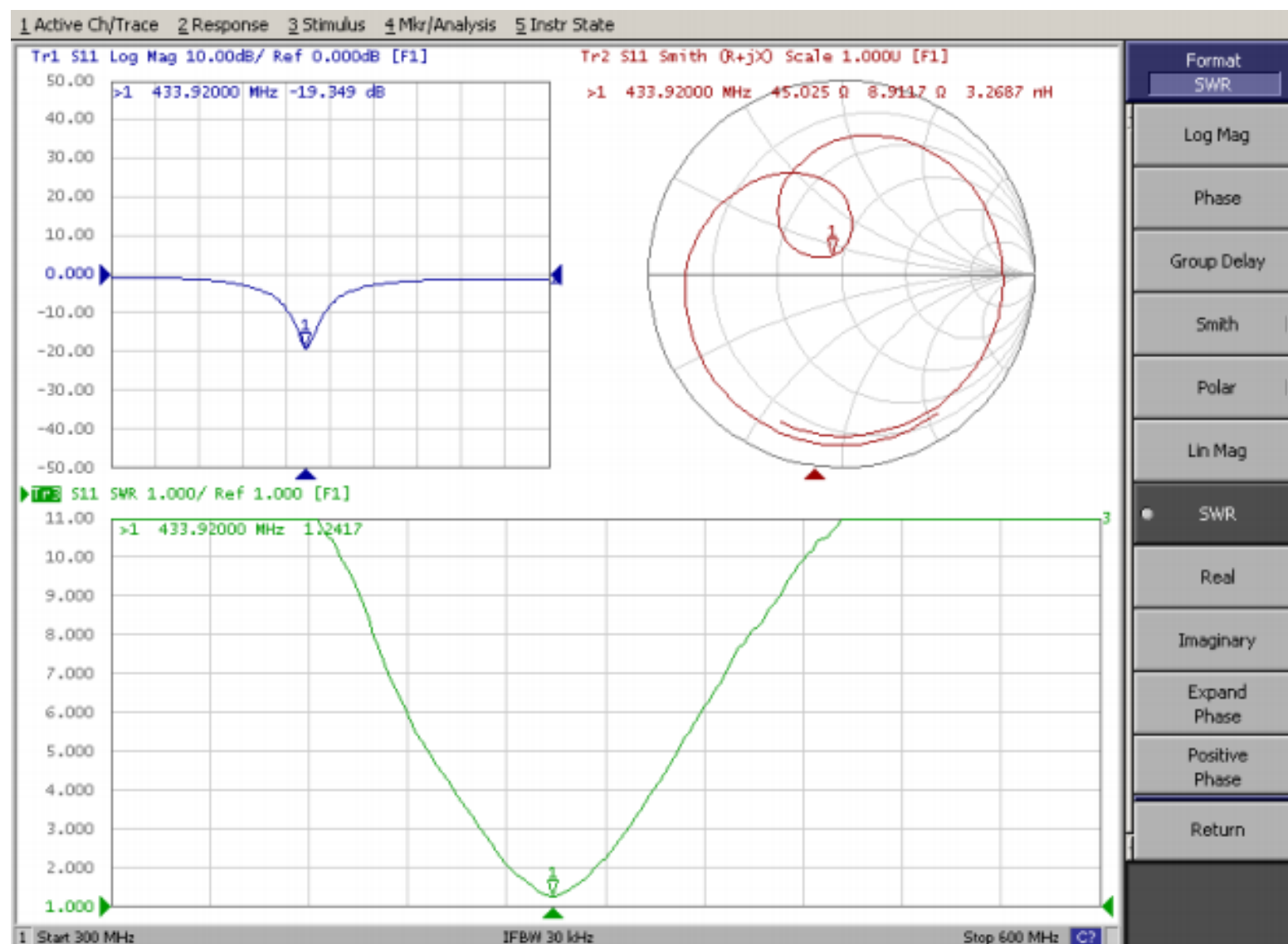
1. Reliability Testing

Test Item	Procedure	Requirement
1. Visual inspection and Dimension Check	Applicable methods using x5 magnification	follow specification
2. Rapid Changing of Temperature	-40°C (30minutes) to 80°C (30minutes); 24 cycles	After 2 hours recovery: 1. no visible damage 2. bandwidth tolerance < ±5%
3. Damp Heat	24 hours at 60°C; 90 ~ 95% RH	After 2 hours recovery: 1. no visible damage 2. bandwidth tolerance < ±5%
4. Endurance	24 hours at 80°C	After 2 hours recovery: 1. no visible damage 2. bandwidth tolerance < ±5%
5. Connector Pull Strength Test	>= 1.0 Kg	Hold 2~3S: 1. no visible damage 2. bandwidth tolerance < ±5%

2. Specification

A. Electrical Characteristics	
S.W.R.(Tested in PC)	$\leq 2.0 @ 433\text{MHz}$
Typical Antenna Gain	$+1.0 \pm 0.5$
Impedance	50 Ohm
B. Material	
Material of Radiator	CU
Connector Type	N/A
C. Environmental	
Operation Temperature	$-30\text{ }^{\circ}\text{C} \sim +85\text{ }^{\circ}\text{C}$
Storage Temperature	$-30\text{ }^{\circ}\text{C} \sim +85\text{ }^{\circ}\text{C}$

3. S.W.R. Testing Result



4. Antenna Radiation Pattern

Testing Equipment Specification:

Antenna Anechoic Chamber Dimension: 8 x 4 x 4 m

Quiet Zone: 600mm @1 GHz

Isolation: >100dB @ 1 MHz ~ 10 GHz

Testing Equipment: Agilent 5071B

Received Antenna: 0.7 ~ 6.0 GHz for Gain Calibration

Double Ridged Horn Antenna

