



DongGuan Hengxin Technology Inc.

### Sample Approval Sheet

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

Model Name: 868MHz Spring antenna

Part No: HX-B97

Customer Part No: \_\_\_\_\_

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

| Customer Confirm |              |               | Vendor                              |         |
|------------------|--------------|---------------|-------------------------------------|---------|
| Engineer Part    | Quality part | Purchase part | Approval                            | Release |
|                  |              |               | <div>zhao</div> <div>shouGang</div> |         |

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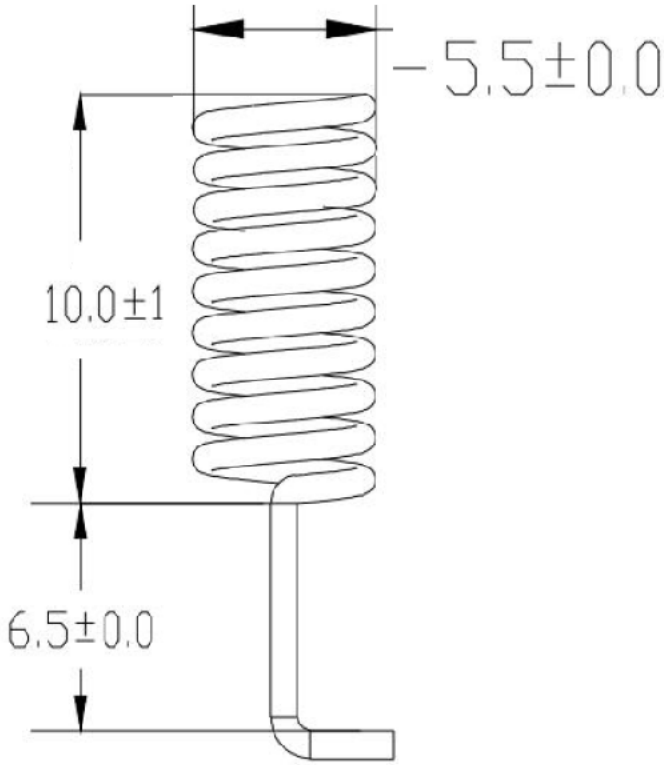
# Catalogue

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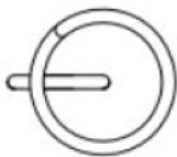
# Dimension Diagram

Part Name: Spring antenna      Part No: HX-B97

Unit: mm



Front Review



Top Review



Bottom Review

Remark:

1. Materies: 0.8 Nickel plating on steel、T=9T

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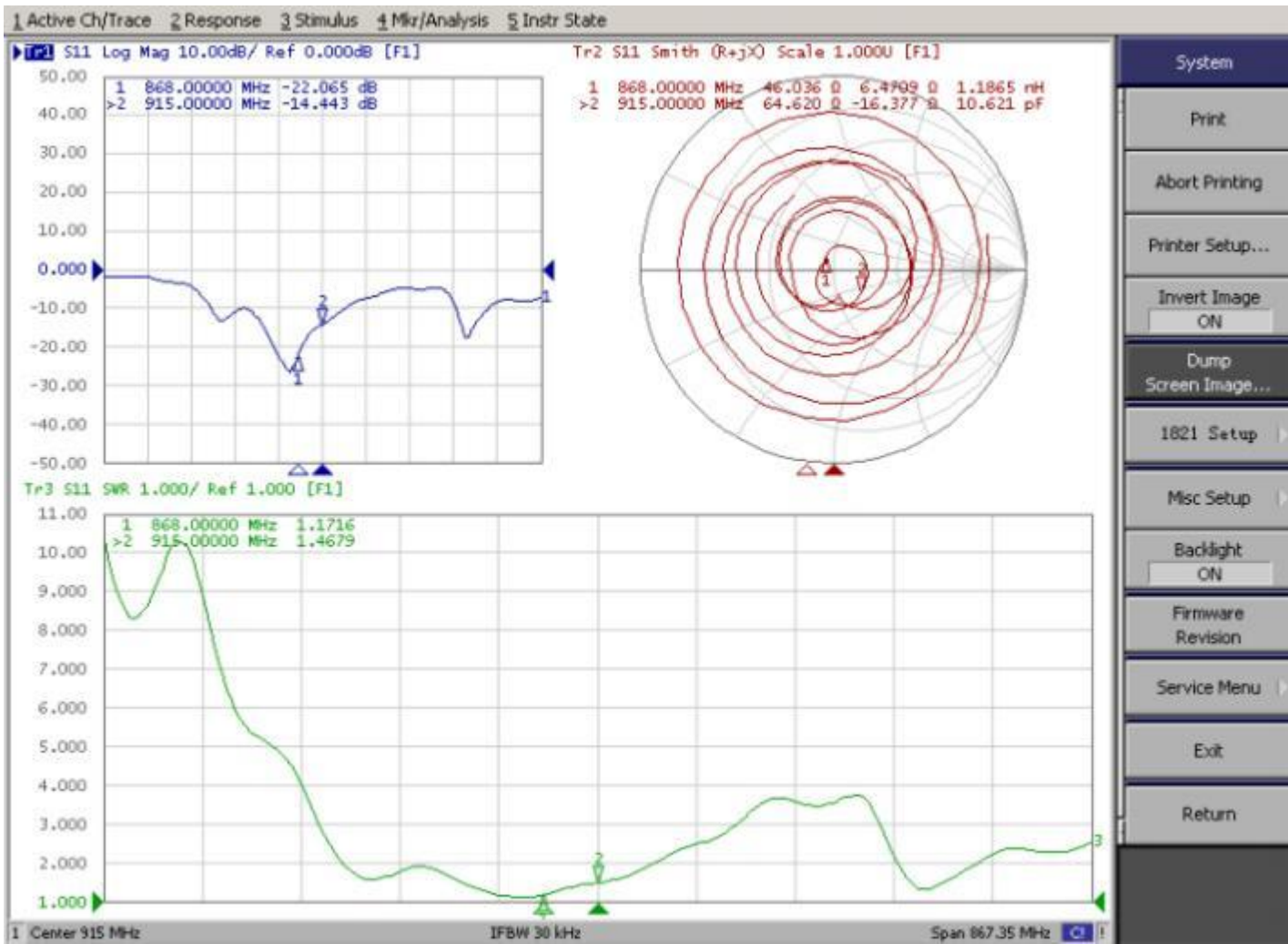
1. Reliability Testing

| 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:<br>1. no visible damage<br>2. bandwidth tolerance < ±5% |
| 3. Damp Heat                             | 24 hours at 60°C; 90 ~ 95% RH                    | After 2 hours recovery:<br>1. no visible damage<br>2. bandwidth tolerance < ±5% |
| 4. Endurance                             | 24 hours at 80°C                                 | After 2 hours recovery:<br>1. no visible damage<br>2. bandwidth tolerance < ±5% |
| 5. Connector Pull Strength Test          | >= 1.0 Kg                                        | Hold 2~3S:<br>1. no visible damage<br>2. bandwidth tolerance < ±5%              |

2. Specification

| A. Electrical Characteristics |                   |
|-------------------------------|-------------------|
| S.W.R.( Tested in PC )        | <= 8 6 8 MHZ      |
| Typical Antenna Gain          | +1.0 ± 0.5        |
| Impedance                     | 50 Ohm            |
| B. Material                   |                   |
| Material of Radiator          | CU                |
| Connector Type                | N/A               |
| C. Environmental              |                   |
| Operation Temperature         | - 30 °C ~ + 85 °C |
| Storage Temperature           | - 30 °C ~ + 85 °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

