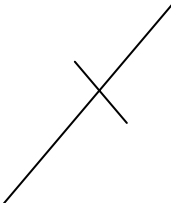


HOSEO TELNET

APPROVAL SHEET

ST-902 Tx HELICAL ANTENNA		
NO	MODEL	FREQUENCY
1	HS901-T1	896 ~ 902 MHz

공 급 업 체			승 인 업 체		
작 성	검 토	승 인	작 성	검 토	승 인
					



HANWOOL TECHNOLOGY

#1001, 1002 IT303-DONG, SAMJUNG-DONG, OHJUNG-GU,
PUCHON-CITY, KYOUNG GI-DO, KOREA
TEL : 032) 624-2555 FAX : 032) 624-2559

ANTENNA SPECIFICATION

1. MODEL: HS901-T1

2. APPLICATION: This specification is provided for 900MHz Tx HELICAL ANTENNA.

3 ANTENNA used condition

☒ Portable ☒ Fixing ☐ Movement ☒ Out-door ☒ In-door ☒ Etc()

4. ANTENNA Drawing

Attached Drawing paper

5. Electrical specification and performance

Satisfied next data with real used or similar environment conditions.

No.	ELECTRICAL DATA	SPECIFICATIONS	REMARK
5. 1	FREQUENCY RANGE	896 ~ 902 MHz	
5. 2	RESONANCE FREQUENCY	899 MHz	SET CONDITION
5. 3	IMPEDANCE	50Ω NOMINAL	
5. 4	V . S . W . R	LESS THAN 2.0	
5. 5	GAIN	-5.0 ± 1.0 dBi	
5. 6	RADIATION PATTERN	OMNI - DIRECTIONAL	
5. 7	POLARIZATION	VERTICAL	

6. Hardware specification and mechanical

No.	MECHANICAL	SPECIFICATIONS	REMARK
6. 1	SPRING	Φ 0.5 PWG	Ni-PLATING
6. 2	ANTENNA TOTAL LENGTH	16.0 ± 1.0 mm	

7. HELIX DEFORMATION

Bending Force : $F_b = 5 \text{ Kgf}$

Demands : No visual and mechanical changes.

The fitting and mold will be unchanged mechanically during the test.

The antenna shall satisfy the electrical data.

8. SINUSOIDAL VIBRATION

Vibration Frequencies : 5- 55 - 5 Hz (1 cycle)

Sweep Rate : 1 cycle/min

Maximum Amplitude : A - 1.5 mm

Maximum Acceleration : 2 g

Measuring method

The antenna is combined in the test equipment.

The vibration is done X and Y direction (left, right, up and down) according to below image.

It continued for 2 hours each direction.

9. OPERATING TEMPERATURE

Temperature : $- 30^{\circ}\text{C} \sim +70^{\circ}\text{C}$

Demands : Set Antenna for 96 hours each temperature.

No visual and mechanical changes.

The fitting and mold will be unchanged mechanically during the test.

The antenna shall satisfy the electrical data

10. HUMIDITY

Condition : 90% ~ 95% / $+40^{\circ}\text{C}$

Measuring method

Antenna is placed in climatic chamber for 96 hours.

Antenna is taken out from the chamber and measured

after another 24 hours in room temperature

Demands : No visual and mechanical changes.

The fitting and mold will be unchanged mechanically during the test.

The antenna shall satisfy the electrical data.

11. TEST and Q/C

This specification is according to fitting demands and suitable Hanwool technology Q/C provision.

But it is possible to skip No. 7~10 demands, after consultation with buyer.

DQ No.	HW-081203-1	Modify No.		Write	Wan-choul. Lee
Supply to	HOSEO TELNET	Date	2008-12-03	Approval	Chang-gi. Nam

Hanwool
Technology

TOL Unless Noted

X₁ = ±0.5

X.X = ±0.1

X.XX = ±0.05

DIMENSION

SCALE

MATERIAL

FINISH

mm

PWG

No



DATE

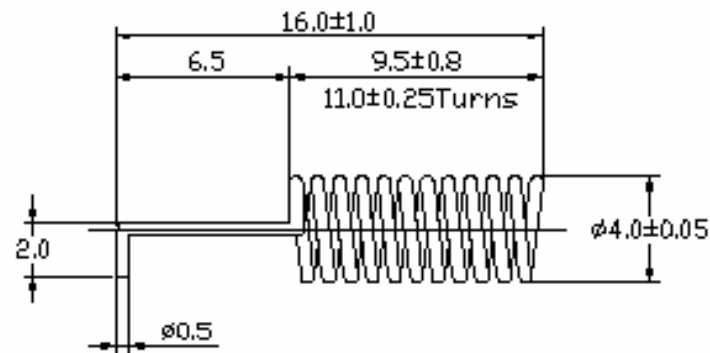
20 . . .

20 . . .

NI-PLATING

REVISION

CHECKER



TITLE

ST-902 Tx SPRING

MODEL

HS901-T1

Drawn

Checked

Approval

Date

DWG No.

File Name

W.C,LEE

C.G,NAM

2008.11.29

081129-1

HOSED TELNET

No.

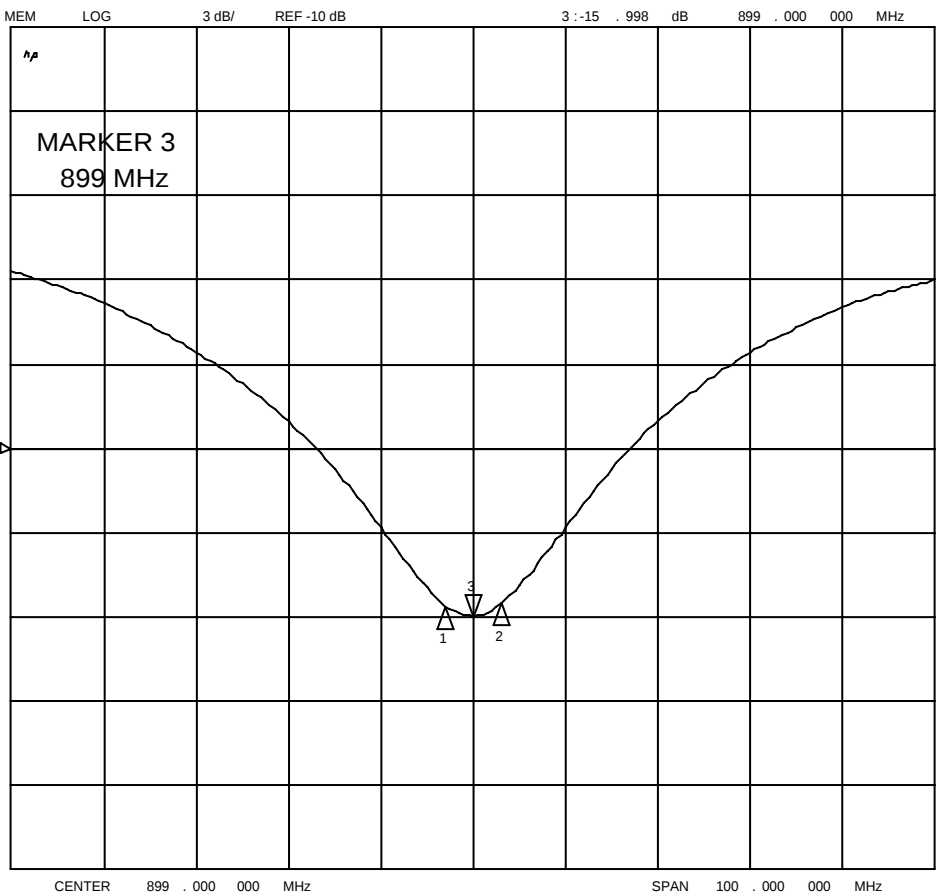
PART NAME

MATERIAL

FINISH

28 Nov 2008 00:45:37

CH1



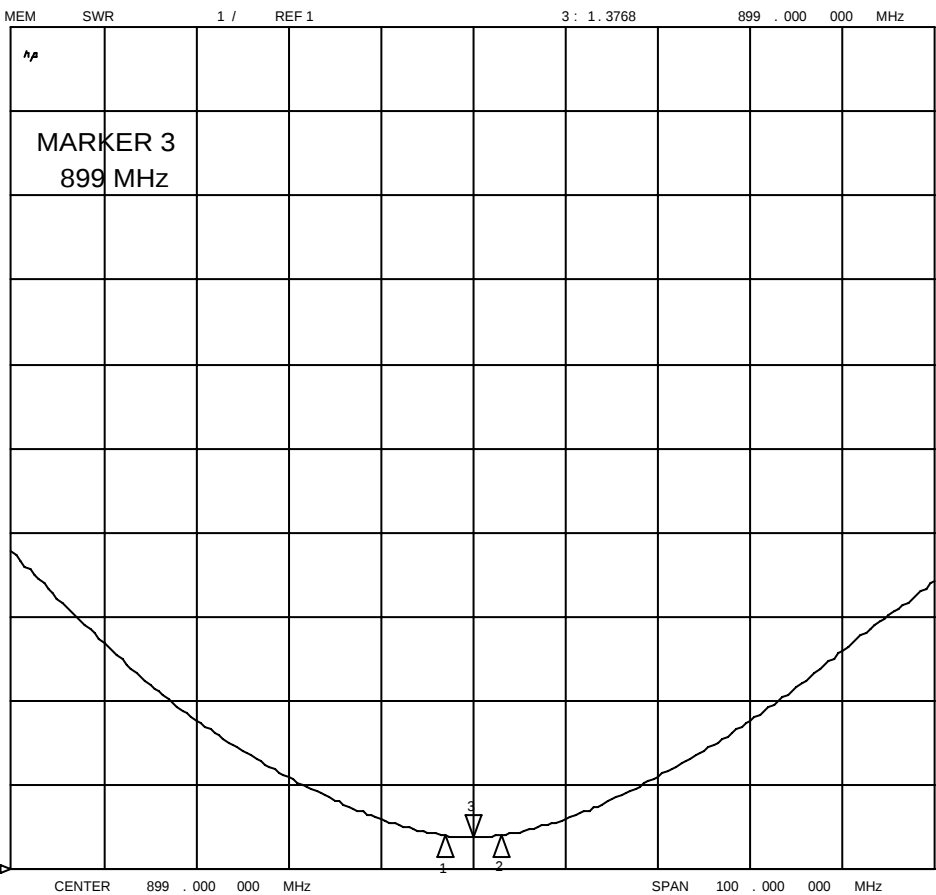
CH1 Markers

1 :-15 .641 dB
896 .000 MHz

2 :-15 .548 dB
902 .000 MHz

STIMULUS	CH1 MEM
MHz	
887.000 000	-11.938 dB
887.500 000	-12.204 dB
888.000 000	-12.379 dB
888.500 000	-12.608 dB
889.000 000	-12.842 dB
889.500 000	-13.062 dB
890.000 000	-13.251 dB
890.500 000	-13.497 dB
891.000 000	-13.710 dB
891.500 000	-13.965 dB
892.000 000	-14.177 dB
892.500 000	-14.355 dB
893.000 000	-14.596 dB
893.500 000	-14.780 dB
894.000 000	-14.956 dB
894.500 000	-15.154 dB
895.000 000	-15.304 dB
895.500 000	-15.488 dB
896.000 000	-15.641 dB
896.500 000	-15.726 dB
897.000 000	-15.847 dB
897.500 000	-15.896 dB
898.000 000	-15.958 dB
898.500 000	-15.974 dB
899.000 000	-15.998 dB
899.500 000	-15.952 dB
900.000 000	-15.934 dB
900.500 000	-15.858 dB
901.000 000	-15.780 dB
901.500 000	-15.666 dB
902.000 000	-15.548 dB
902.500 000	-15.399 dB
903.000 000	-15.248 dB
903.500 000	-15.071 dB
904.000 000	-14.896 dB
904.500 000	-14.708 dB
905.000 000	-14.511 dB
905.500 000	-14.340 dB

CH1



CH1 Markers

1 : 1.3957
896 .000 MHz

2 : 1.4008
902 .000 MHz

STIMULUS	CH1 MEM
MHz	
887.000 000	1.6773
887.500 000	1.6502
888.000 000	1.6332
888.500 000	1.6116
889.000 000	1.5906
889.500 000	1.5717
890.000 000	1.5558
890.500 000	1.5362
891.000 000	1.5198
891.500 000	1.5010
892.000 000	1.4860
892.500 000	1.4738
893.000 000	1.4579
893.500 000	1.4461
894.000 000	1.4352
894.500 000	1.4233
895.000 000	1.4146
895.500 000	1.4041
896.000 000	1.3957
896.500 000	1.3911
897.000 000	1.3846
897.500 000	1.3821
898.000 000	1.3788
898.500 000	1.3780
899.000 000	1.3768
899.500 000	1.3792
900.000 000	1.3801
900.500 000	1.3840
901.000 000	1.3882
901.500 000	1.3943
902.000 000	1.4008
902.500 000	1.4092
903.000 000	1.4178
903.500 000	1.4283
904.000 000	1.4389
904.500 000	1.4507
905.000 000	1.4634
905.500 000	1.4748