

AnyDATA.NET

# APPROVAL SHEET

ITEM : HW - 3BM - SMA

FREQUENCY : TRIPLE MAGNET-ANTENNA

FOR CDMA/USPCS/GPS

HANUL Technology

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# ANTENNA SPECIFICATION

1. ITEM : HW-3BM-SMA

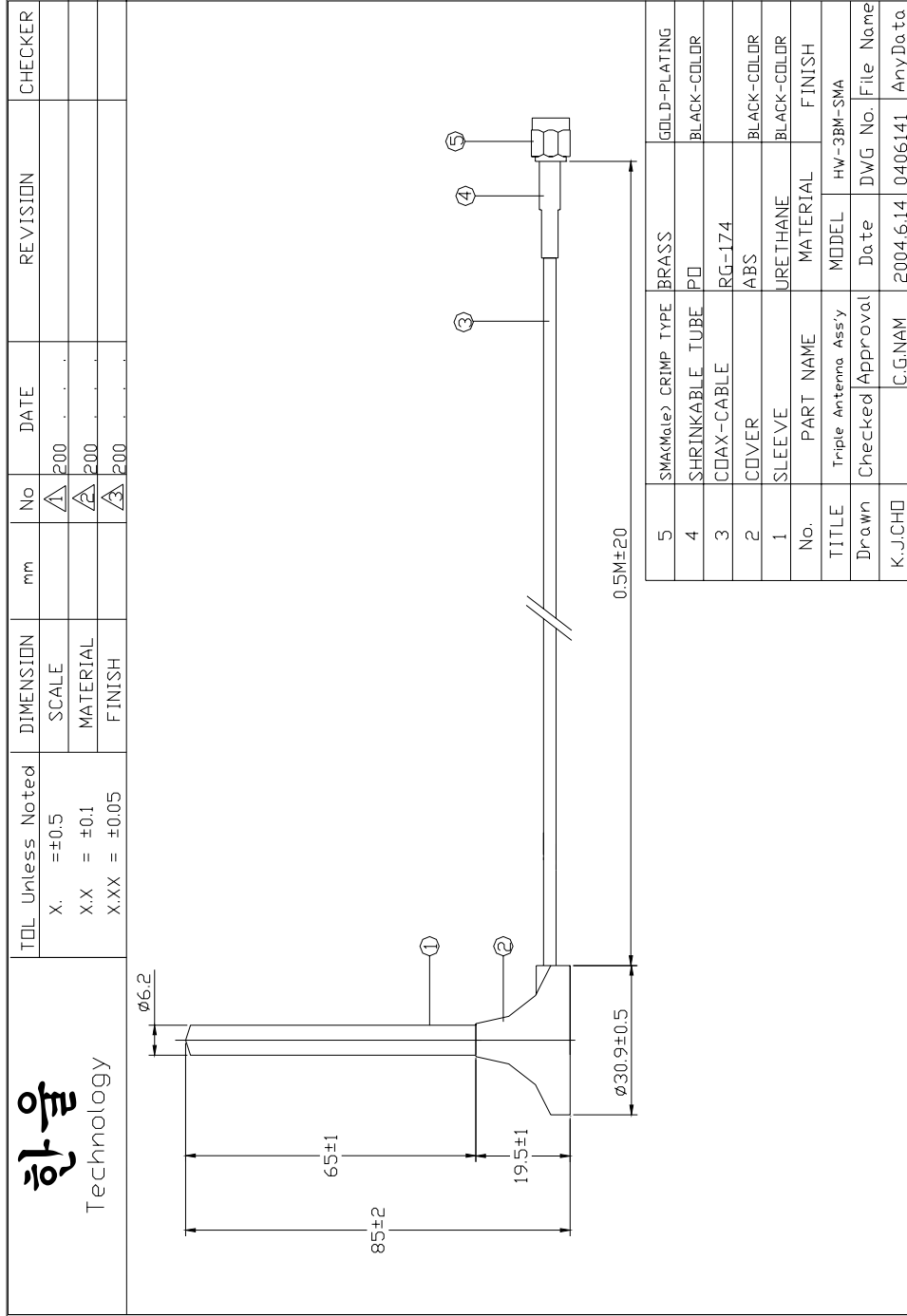
2. Electrical Specifications

No.	ELECTRICAL DATA	SPECIFICATIONS		REMARK
2.1	RESONANCE FREQUENCY	AMPS	824MHz-894MHz	
		GPS	1575MHz	
		UPPCS	1850MHz-1990MHz	
2.2	IMPEDANCE	50Ω NOMINAL		
2.3	GAIN	CDMA	+ 1dBi	Peak
		GPS	-4dBi	
		USPCS	+ 1dBi	
2.4	ELECTRICAL LENGTH	1/4 λ		
2.5	RADIATION PATTERN	OMNI – DIRECTIONAL		
2.6	POLARIZATION	VERTICAL		

3. Mechanical Specifications

No.	MECHANICAL	SPECIFICATIONS	REMARK
3.1	ELEMENT	Ø0.5-PWG	Ni-PLATING
3.2	SLEEVE	URETHANE	BLACK-COLOR
3.3	COVER	ABS	BLACK-COLOR
3.4	CONNECTOR	SMA(Male)	GOLD-PLATING
3.5	TOTAL LENGTH	85 ± 2.0 mm	

# 4. Antenna Configuration

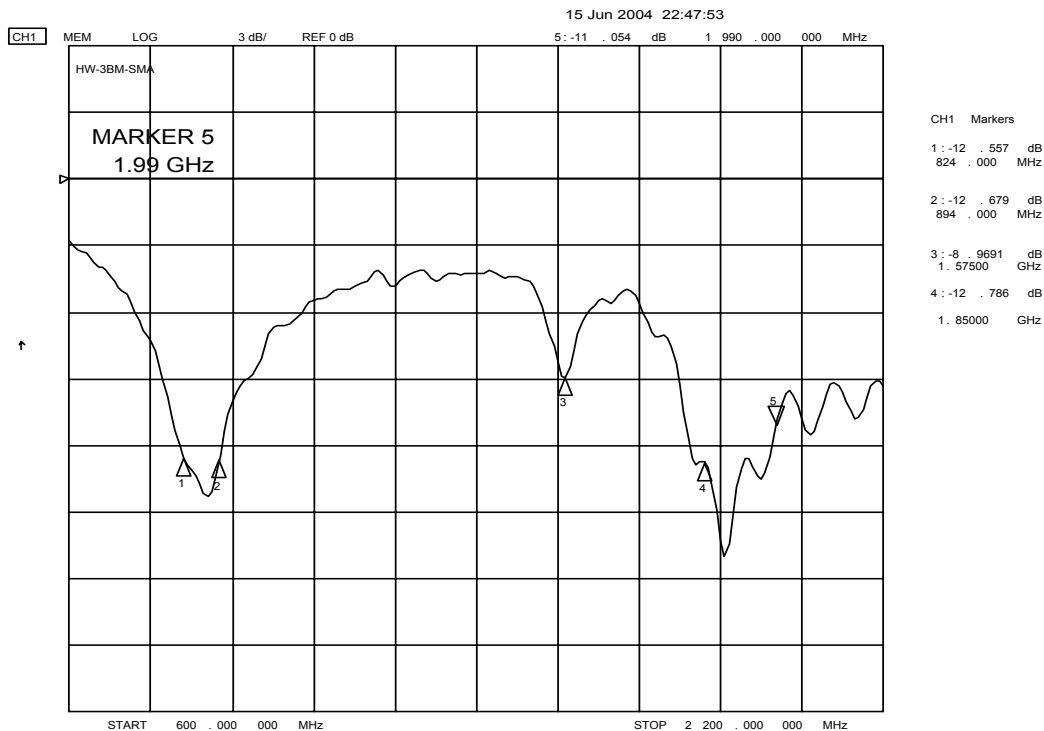


<b>한울</b> Technology	TOL Unless Noted	DIMENSION	No	DATE	REVISION	CHECKER
	X. = ±0.5	SCALE	A	200		
	XX = ±0.1	MATERIAL	A	200		
	XXX = ±0.05	FINISH	A	200		

5	SMA(Male) CRIMP TYPE	BRASS	GOLD-PLATING
4	SHRINKABLE TUBE	PO	BLACK-COLOR
3	COAX-CABLE	RG-174	
2	COVER	ABS	BLACK-COLOR
1	SLEEVE	URETHANE	BLACK-COLOR
No.	PART NAME	MATERIAL	FINISH
TITLE	Triple Antenna Ass'y	MODEL	HW-3BM-SMA
Drawn	Checked	Approval	DWG No.
K.J.CH			0406141
			File Name
			Any Data

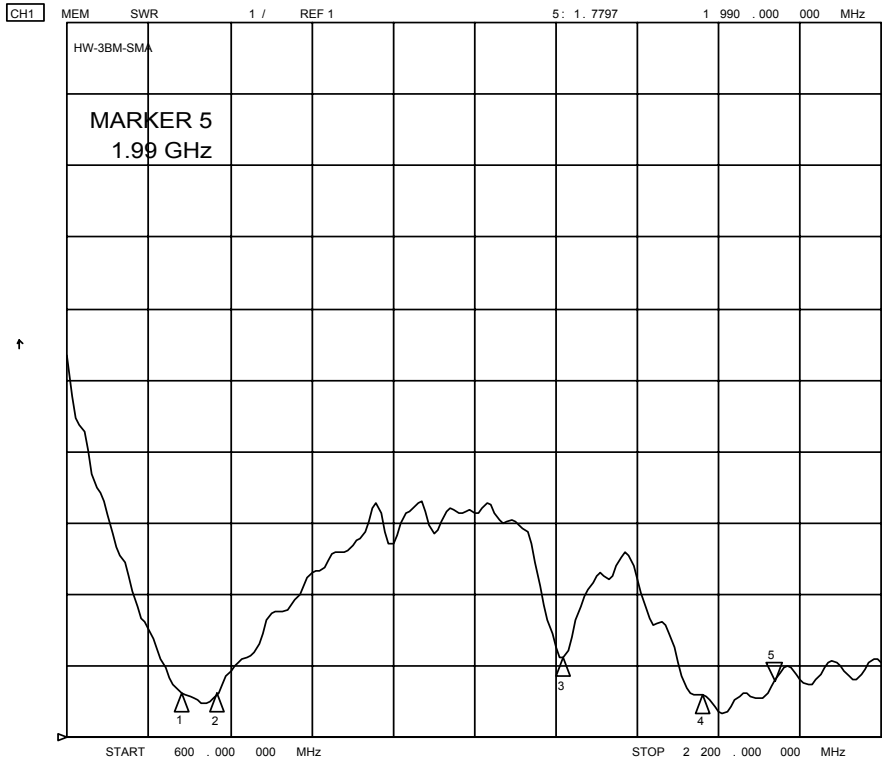
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# 5. Measurement Result



MARKER PARAM	Channel 1	Channel 2	Channel 3	Channel 4
MARKER 1	824 . 000000MHz -12 . 557 dB	0. 000000MHz OFF	0. 000000MHz OFF	0. 000000MHz OFF
MARKER 2	894 . 000000MHz -12 . 679 dB	0. 000000MHz OFF	0. 000000MHz OFF	0. 000000MHz OFF
MARKER 3	1575 . 000000MHz -8 . 9691 dB	0. 000000MHz OFF	0. 000000MHz OFF	0. 000000MHz OFF
MARKER 4	1850 . 000000MHz -12 . 786 dB	0. 000000MHz OFF	0. 000000MHz OFF	0. 000000MHz OFF
MARKER 5	1990 . 000000MHz -11 . 054 dB	0. 000000MHz OFF	0. 000000MHz OFF	0. 000000MHz OFF
MKR STIM OFFSET	0. 000000MHz 0 dB	0. 000000MHz 0 dB	0. 000000MHz . 0000 dB	0. 000000MHz 0 dB
REFERENCE MARKER	OFF	OFF	OFF	OFF
PLACEMENT	CONTINUOUS	CONTINUOUS	CONTINUOUS	CONTINUOUS
MARKER SEARCH	OFF	OFF	OFF	OFF
TARGET VALUE	-3 dB	-3 dB	-3 dB	-3 dB
MKR WIDTH VALUE	-3 dB	-3 dB	-3 dB	-3 dB
MARKER TRACKING	OFF	OFF	OFF	OFF
SMOOTH APERTURE	1 % SPAN	1 % SPAN	1 % SPAN	1 % SPAN
PHASE OFFSET	0 °	0 °	0 °	0 °
ELECTRICAL DELAY	0 s	0 s	0 s	0 s

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CH1 Markers

1:	1.6163	824.000	MHz
2:	1.6068	894.000	MHz
3:	2.1059	1.57500	GHz
4:	1.5957	1.85000	GHz

MARKER PARAM	Channel 1	Channel 2	Channel 3	Channel 4
MARKER 1	824.000000MHz 1.6163	0.000000MHz OFF	0.000000MHz OFF	0.000000MHz OFF
MARKER 2	894.000000MHz 1.6068	0.000000MHz OFF	0.000000MHz OFF	0.000000MHz OFF
MARKER 3	1575.000000MHz 2.1059	0.000000MHz OFF	0.000000MHz OFF	0.000000MHz OFF
MARKER 4	1850.000000MHz 1.5957	0.000000MHz OFF	0.000000MHz OFF	0.000000MHz OFF
MARKER 5	1990.000000MHz 1.7797	0.000000MHz OFF	0.000000MHz OFF	0.000000MHz OFF
MKR STIM OFFSET	0.000000MHz 0	0.000000MHz 0 dB	0.000000MHz .0000 dB	0.000000MHz 0 dB
REFERENCE MARKER	OFF	OFF	OFF	OFF
PLACEMENT	CONTINUOUS	CONTINUOUS	CONTINUOUS	CONTINUOUS
MARKER SEARCH	OFF	OFF	OFF	OFF
TARGET VALUE	-3	-3 dB	-3 dB	-3 dB
MKR WIDTH VALUE	-3	-3 dB	-3 dB	-3 dB
MARKER TRACKING	OFF	OFF	OFF	OFF
SMOOTH APERTURE	1 % SPAN	1 % SPAN	1 % SPAN	1 % SPAN
PHASE OFFSET	0 °	0 °	0 °	0 °
ELECTRICAL DELAY	0 s	0 s	0 s	0 s