

QUBE 4010 921 MHz OEM RFID Antenna



QUBE 4010 921 MHz UHF RFID Antenna Specification



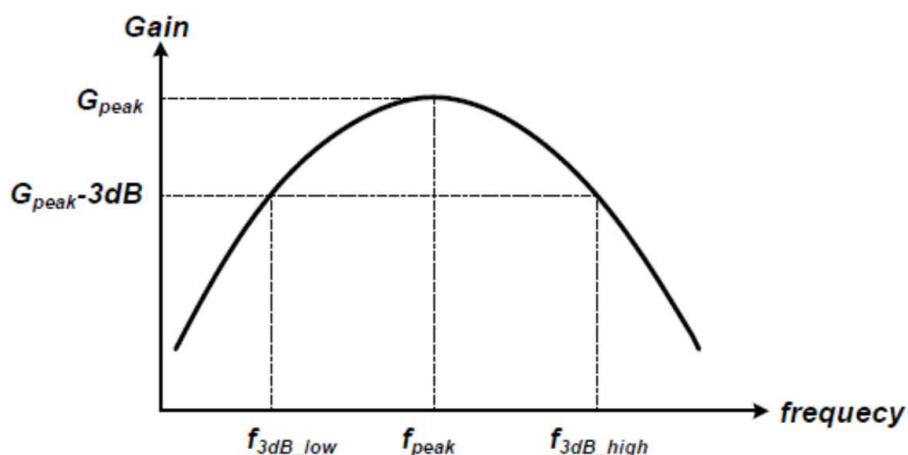
QUBE 4010 921 MHz

OEM RFID Antenna

Electrical Specifications

Item	Specifications			
	Min.	Typical	Max.	Unit
Center Frequency (= Fc)	917	921	925	MHz
Operating Frequency	$F_c \pm 5$	$F_c \pm 8$		MHz
Return Loss @ Operating Frequency			-15	dB
Polarization	R.H.C.P			
Peak Gain @ Fc (RHCP)		0		dBic
Gain @ Reference Antenna		-11		dB
Axial Ratio @ Fc			1.3	
Beamwidth (@3dB)	80	110		degree
Impedance		50		Ω
Operating Temperature	-30		+70	$^{\circ}\text{C}$
Weight		7.0		g

Note 1. Operating frequency is defined as frequency range between f_{3dB_low} and f_{3dB_high} .



Technical drawing of the QUBE 4010 sign, showing three views: front, side, and rear.

Front View: The sign is square with a width of 48 ± 0.5 mm and a height of 40 ± 0.5 mm. It features the "QUBE 4010" logo in the center. The mounting bracket has a height of 92 ± 5 mm. The sign is mounted on a pole with a diameter of $\Phi 1.3$ mm and a height of 100 ± 5 mm.

Side View: The sign is shown from the side, with a width of 9.8 ± 0.3 mm. The mounting bracket has a height of 9.8 ± 0.3 mm. The sign is mounted on a pole with a diameter of $\Phi 1.3$ mm and a height of 100 ± 5 mm.

Rear View: The sign is shown from the back, with a width of 48 ± 0.5 mm and a height of 40 ± 0.5 mm. It features the "SANGSHIN 4010_V2.0" logo and the part number "KSA-921A4010B100B YYWW". The mounting bracket has a height of 92 ± 5 mm. The sign is mounted on a pole with a diameter of $\Phi 1.3$ mm and a height of 100 ± 5 mm.

Dimensions and Tolerances:

- Width: 48 ± 0.5 mm
- Height: 40 ± 0.5 mm
- Mounting Bracket Height: 92 ± 5 mm
- Pole Diameter: $\Phi 1.3$ mm
- Pole Height: 100 ± 5 mm
- Side View Width: 9.8 ± 0.3 mm
- Side View Mounting Bracket Height: 9.8 ± 0.3 mm
- Rear View Width: 48 ± 0.5 mm
- Rear View Height: 40 ± 0.5 mm
- Rear View Mounting Bracket Height: 92 ± 5 mm
- Rear View Pole Diameter: $\Phi 1.3$ mm
- Rear View Pole Height: 100 ± 5 mm

Labels:

- Front View: QUBE 4010
- Side View: 4010_V2.0_
- Rear View: SANGSHIN 4010_V2.0, KSA-921A4010B100B YYWW

Tolerance Unless Otherwise Specified : ± 0.2
Unit : mm

Technical drawing of a square antenna structure. The overall dimensions are 48 units wide and 40 units high. The drawing includes three green rectangular areas representing the exposed conductor and a black outline representing the antenna outline. Dimensions are provided in millimeters (mm).

Legend:

- exposed conductor (green rectangle)
- Antenna outline (black outline)

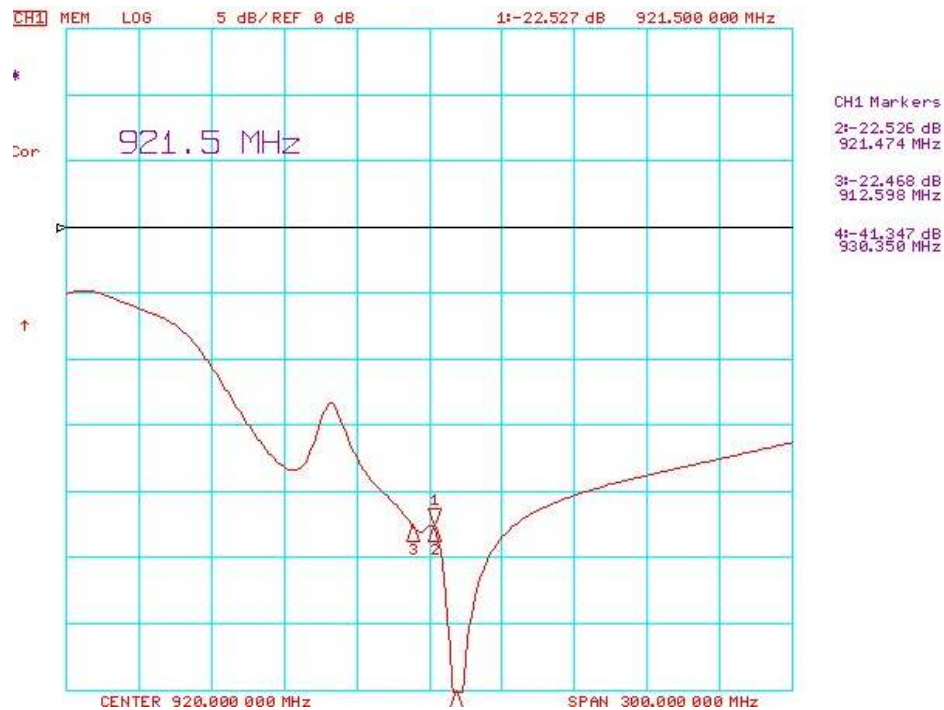
Dimensions (mm):

- Overall width: 48
- Overall height: 40
- Top horizontal segments: 20.5, 7, 20.5
- Left vertical segments: 1.4, 16.5
- Right vertical segments: 2.2, 16.5
- Bottom horizontal segment: 48
- Bottom vertical segments: 16.5, 7

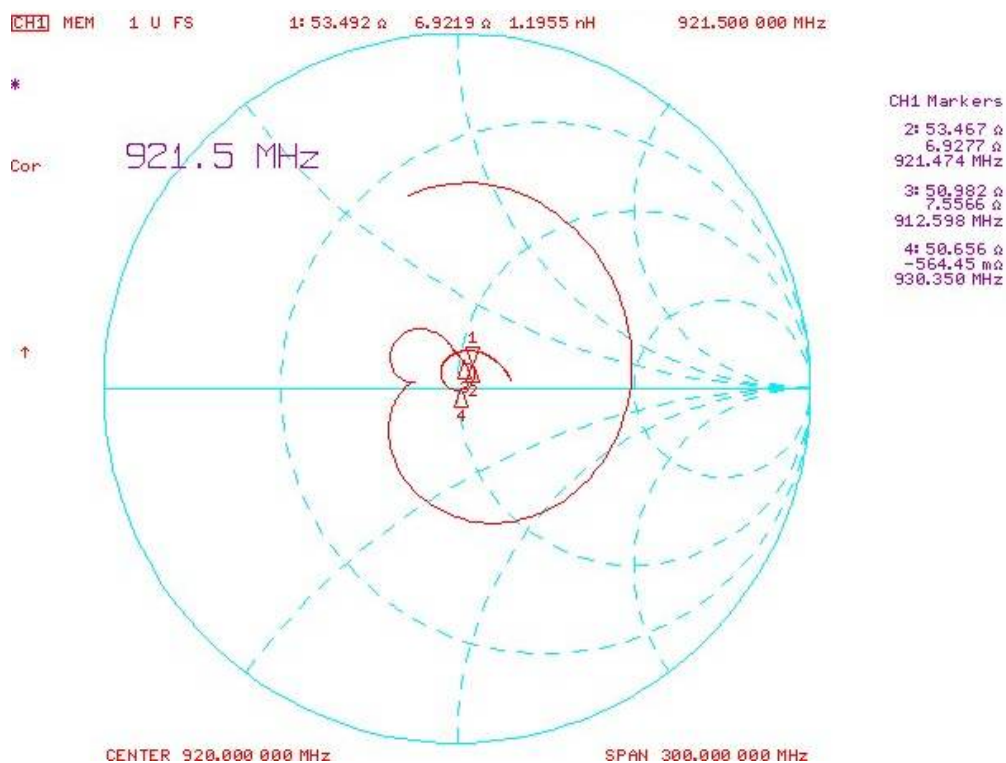
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S-Parameter Data

Return loss (S11)

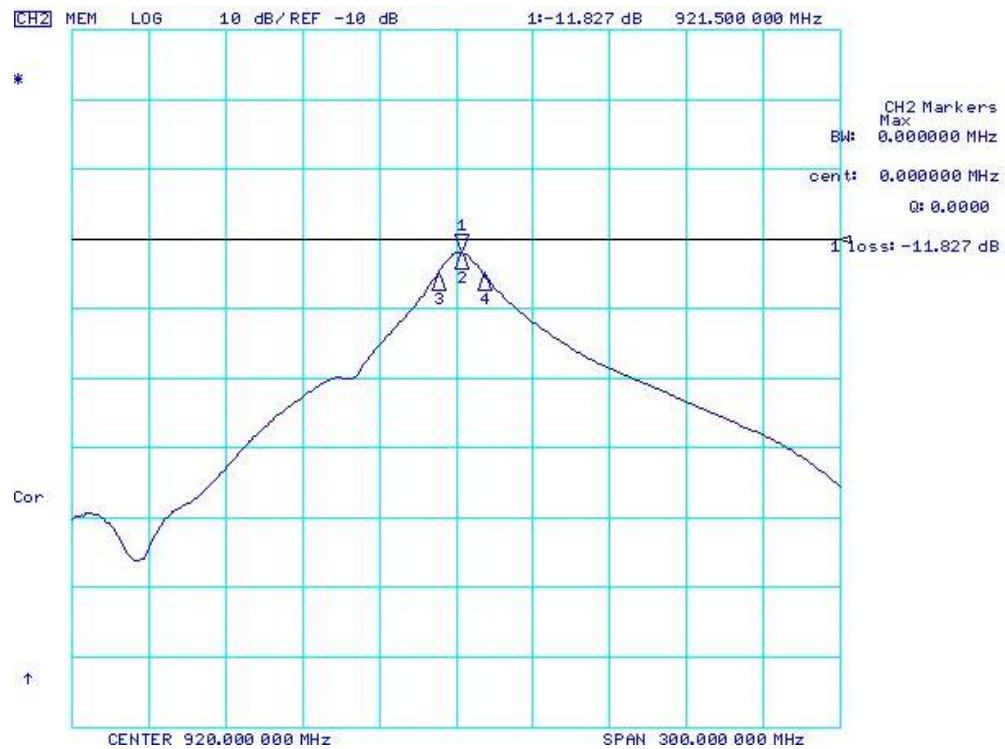


Smith Chart (S11)



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Gain (S21)

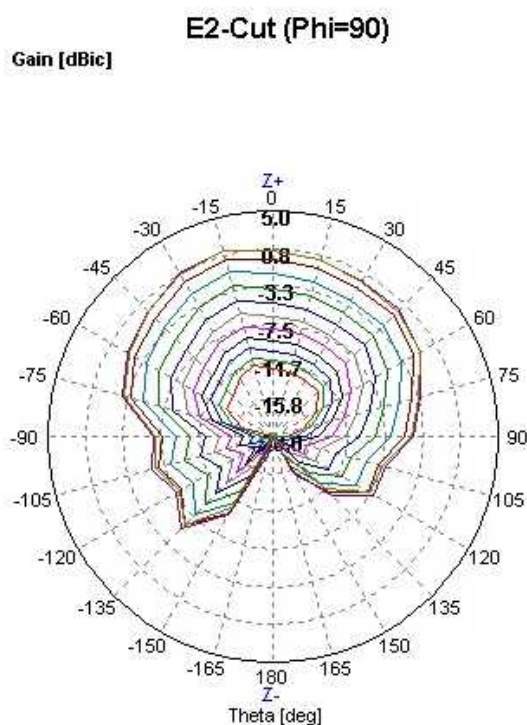


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Antenna Chamber Data

E-Plane

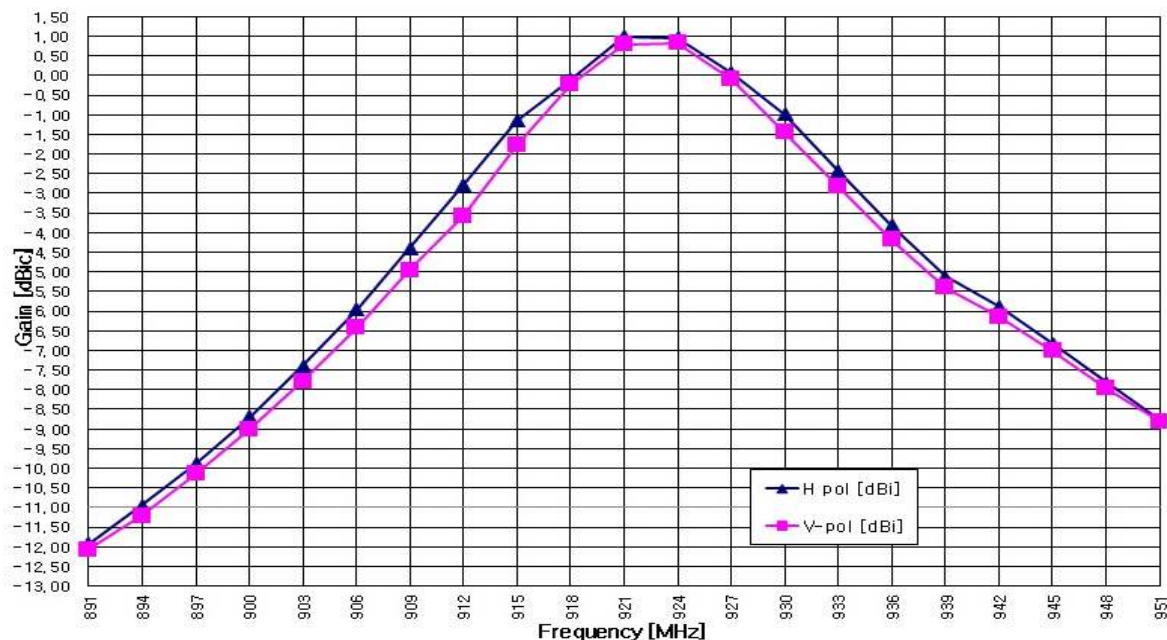


E - plane	
Frequency [MHz]	Gain [dBic]
891	-11.91
894	-10.94
897	-9.87
900	-8.69
903	-7.39
906	-5.95
909	-4.40
912	-2.78
915	-1.15
918	-0.09
921	0.99
924	0.95
927	0.07
930	-0.99
933	-2.44
936	-3.82
939	-5.11
942	-5.88
945	-6.83
948	-7.81
951	-8.75

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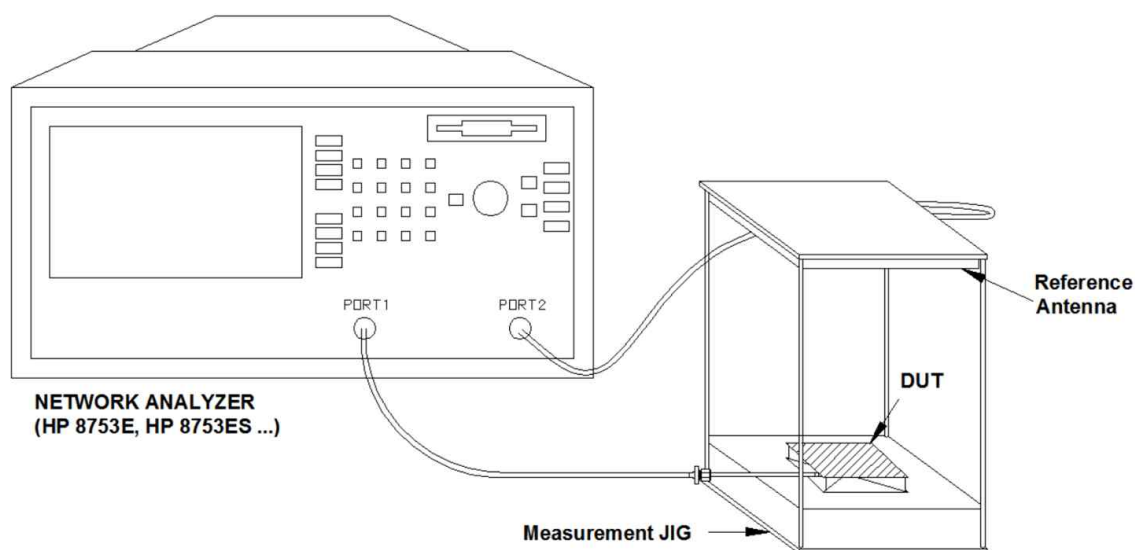
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Gain vs Frequency



Measurement Condition

Parameter Measurement



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Gain Measurement

