



Product Name: DP254 Ceramic Patch Antenna

Part Number: H2P93APAZ10100

Features:

- Supporting: Iridium
- Dimensions: 25 x 25 x 4mm
- Stable and reliable in performances
- Low temperature coefficient of frequency
- RoHS 2.0 compliance

Ceramic Patch Antenna

MODEL: DP254

Version: A

I. Specifications:

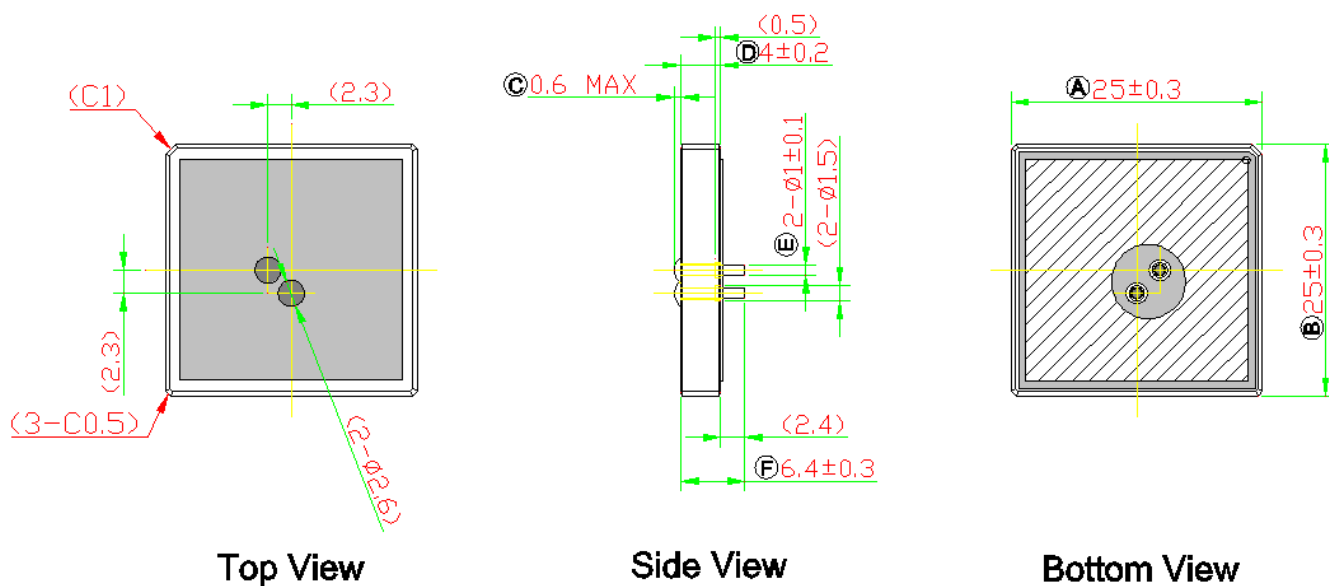
Items	Specifications
Center Frequency (MHz)	1616~1627
Return Loss (dB)	<-10 Typ.
Efficiency (%)	58.7 Typ.
Average Gain (dB)	-2.3 Typ.
Peak Gain(dBi)	3.4 Typ.
Impedance(Ω)	50
Polarization	RHCP
Ground Plane (mm)	100 x 100

Mechanical Specifications	
Dimensions (mm)	25(L) x 25(W) x 4(H)
Material	Ceramic
Environmental Conditions	
Operation & Storage Temperature (°C)	-40 ~ +85
Storage Temperature (°C) (Antenna with packing sealed)	-5 ~ +40
Relative Humidity	10 ~ 70 %

***After the product is unpacked (not used for more than a week), it needs to be sealed package to prevent the silver surface of the product from being oxidized and discolored.**

*** The oxidation and discoloration of the silver surface of the product will not affect the functional electrical properties.**

II. Antenna Dimensions (unit: mm):



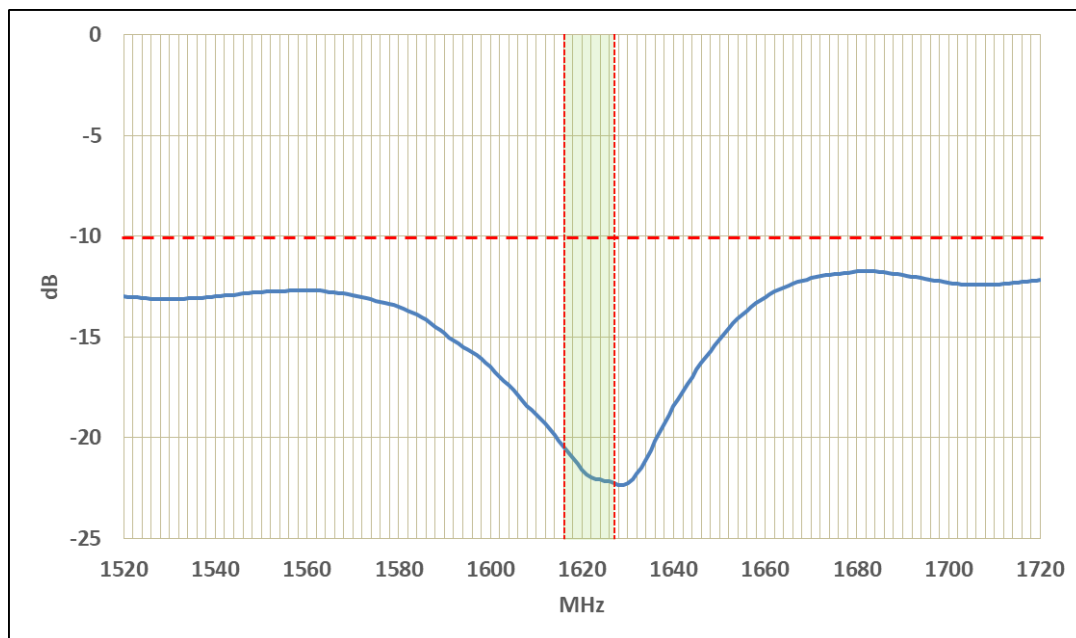
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NOTE:

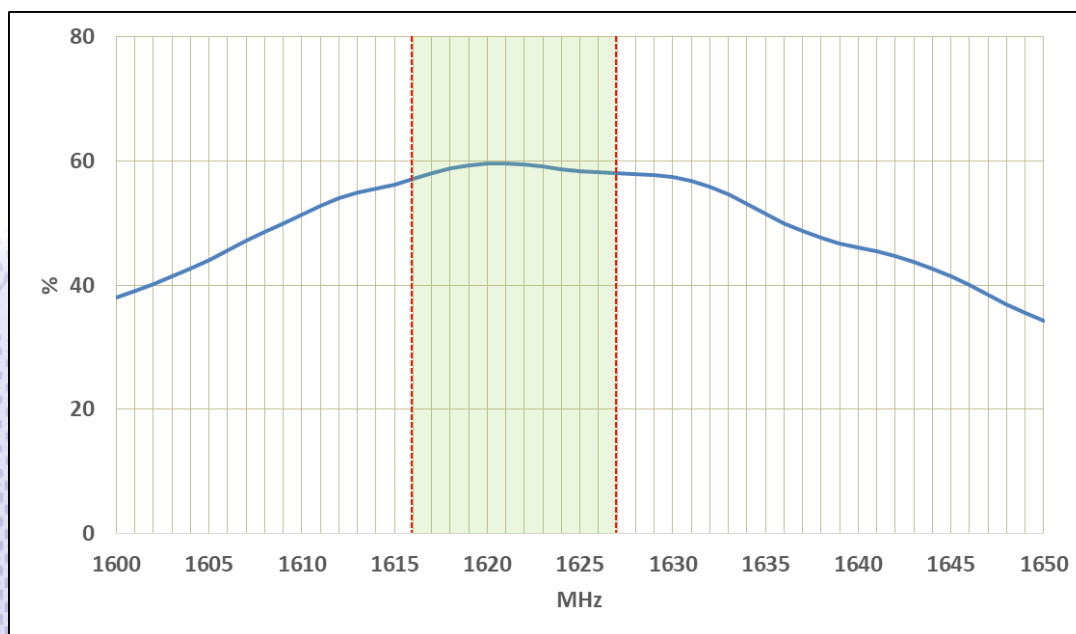
1. All materials are RoHS compliant.
2. "A~F" Critical Dimensions.
3. "()" Reference Dimensions.

III. Properties:

a) Return loss (dB)

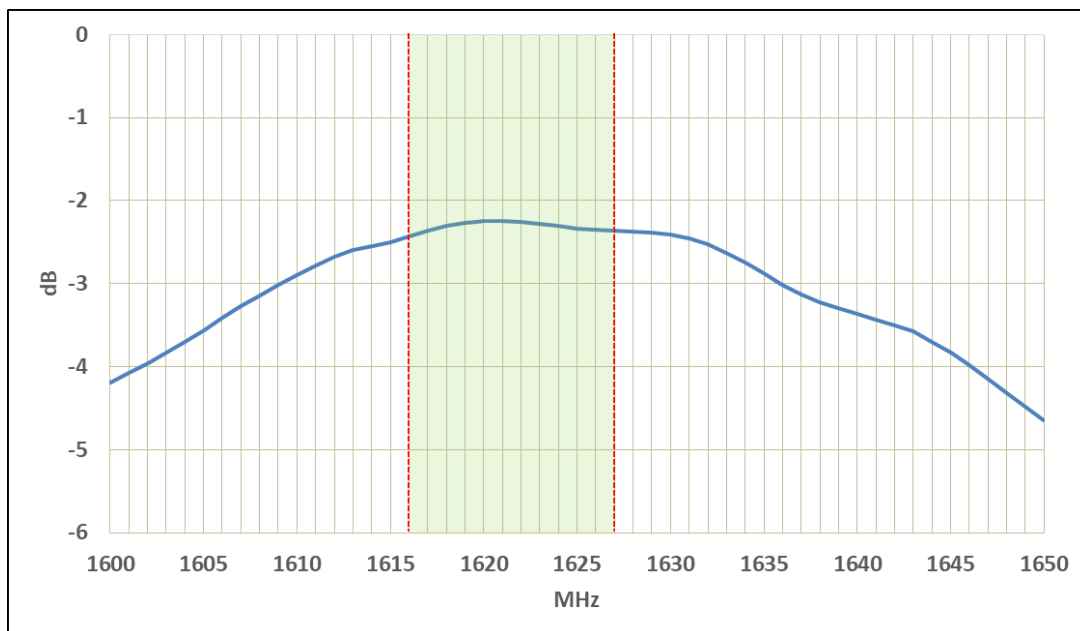


b) Efficiency (%)



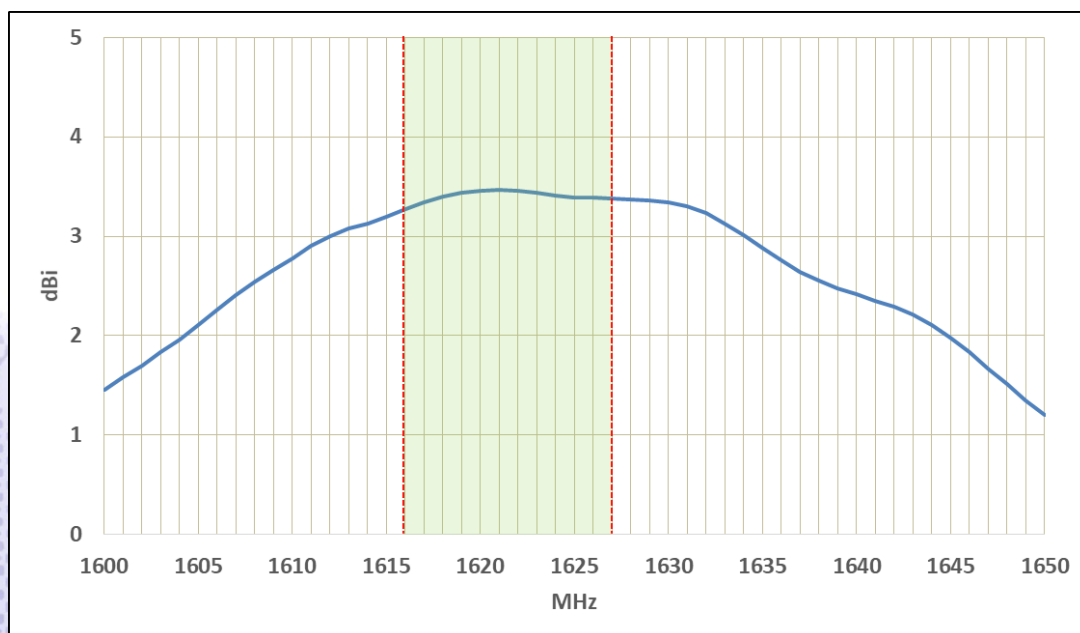
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c) Average Gain (dB)



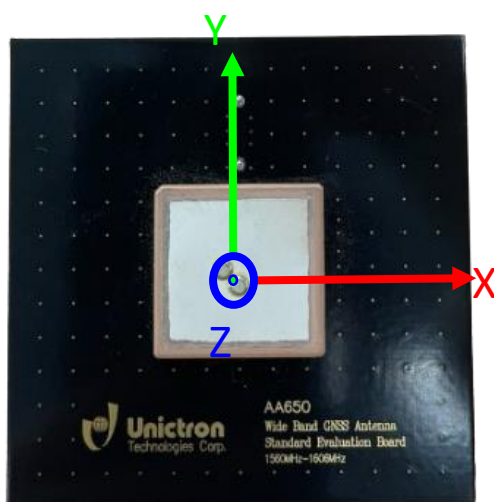
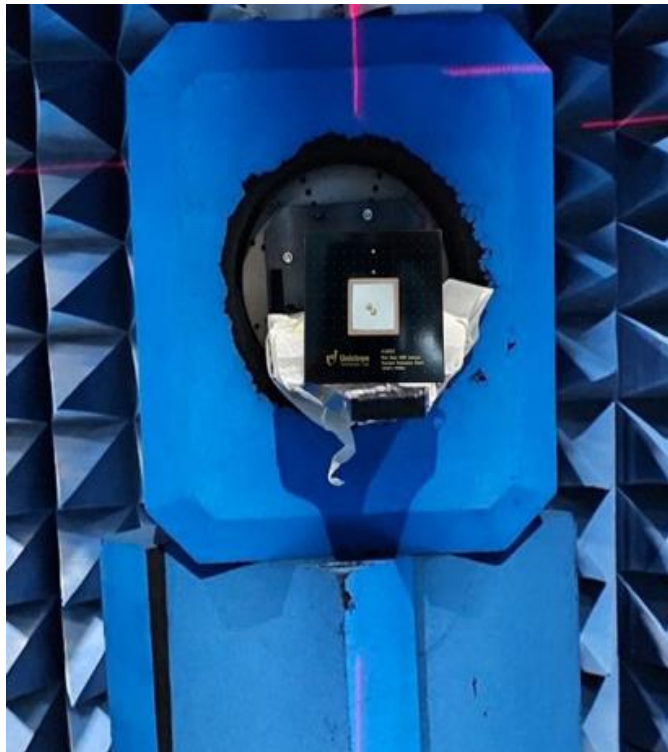
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d) Peak Gain(dBi)

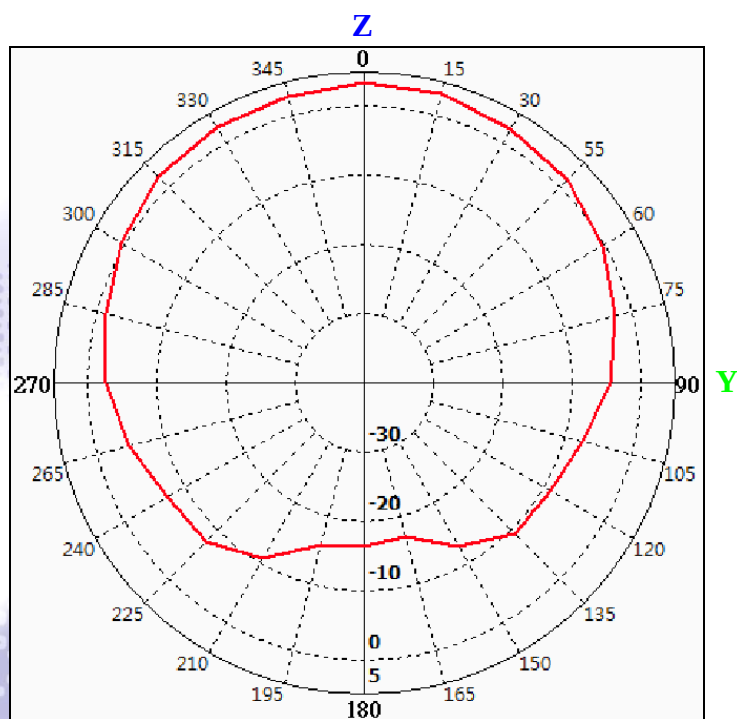
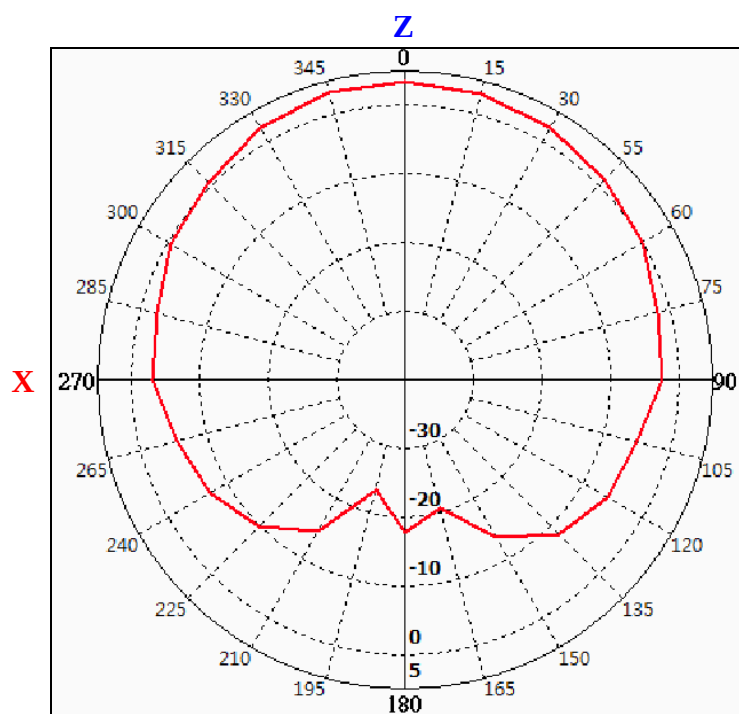


IV. Antenna Radiation Pattern Measurement:

The antenna radiation patterns are measured in Unictron's 3D Anechoic Chamber. The measurement setup is as show below.

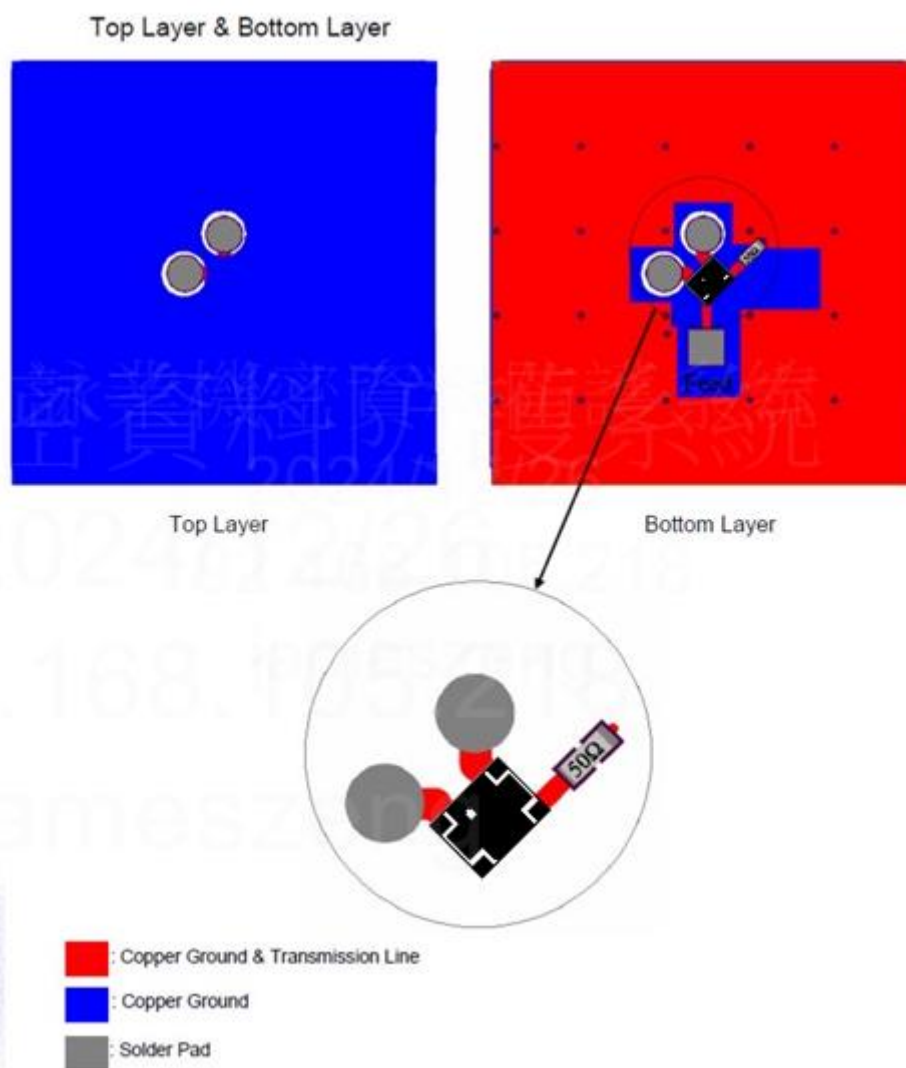


2D Radiation Gain Pattern @1621MHz



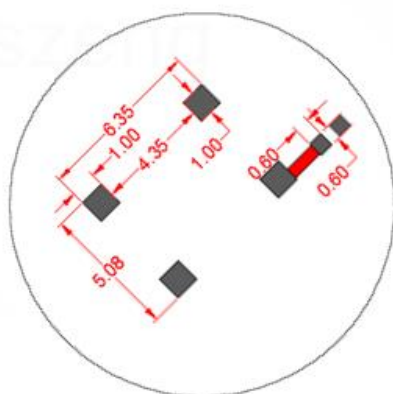
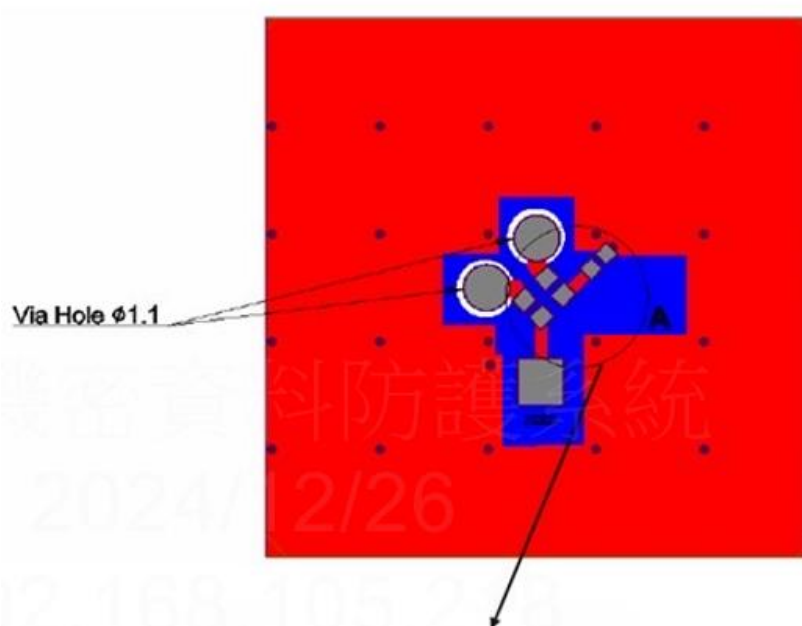
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V. Recommendation PCB Layout



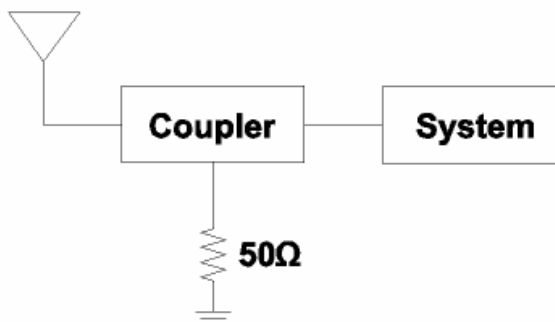
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Footprint



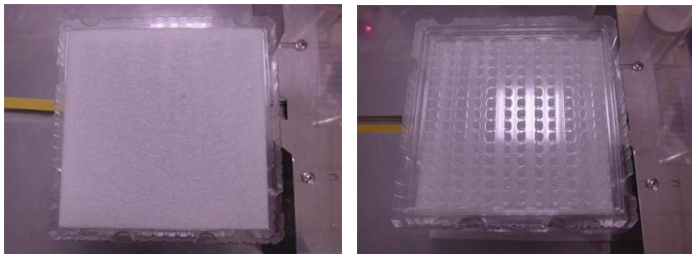
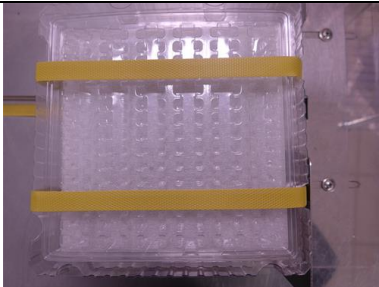
Block Diagram

Antenna



VI. Packing:

- a) Weight:
Unit Weight: 17.6 ± 1 (g)
- b) Quantity:
Each Vacuum Bag: 120 pcs
Each Outer Box: 240 pcs

Step	Pictures	Descriptions
1		Place five trays into one stack. Once stacked, place a sheet of EPE in the depression on the top tray, and then another tray on top. Place another sheet of EPE beneath the bottom tray to complete the stack. Make sure the trays and the EPE sheets are lined up correctly.
2		Place the stacked trays on the packaging machine to be tape punched and tightly secured.
3		Place the stacked trays into a vacuum bag to be vacuum sealed, and then labeled.

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4		Place two vacuum bags vertically into a carton and then seal the carton.
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