



Specification

SPECIFICATION

Part No. : **GP.1575.12.4.A.02**

Specification No : DA1574T

Product Name : **4mm thick GPS Patch Antenna, 1575MHz**

Features : 12mm*12mm*4mm
Halogen Free
ROHS Compliant

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REVISION STATUS

Version	Date	Page	Revision Description	Prepared	Approved
01	Mar 31 2010	All	New format	TW Product Centre	Ronan Quinlan



Specification

1.0 Introduction

This miniaturized ceramic GPS patch antenna is based on smart **XtremeGain™** technology. It is mounted via pin and double-sided adhesive and has been selected as optimal solution for the customer device environment.

2.0 Key Antenna Performance Indicators

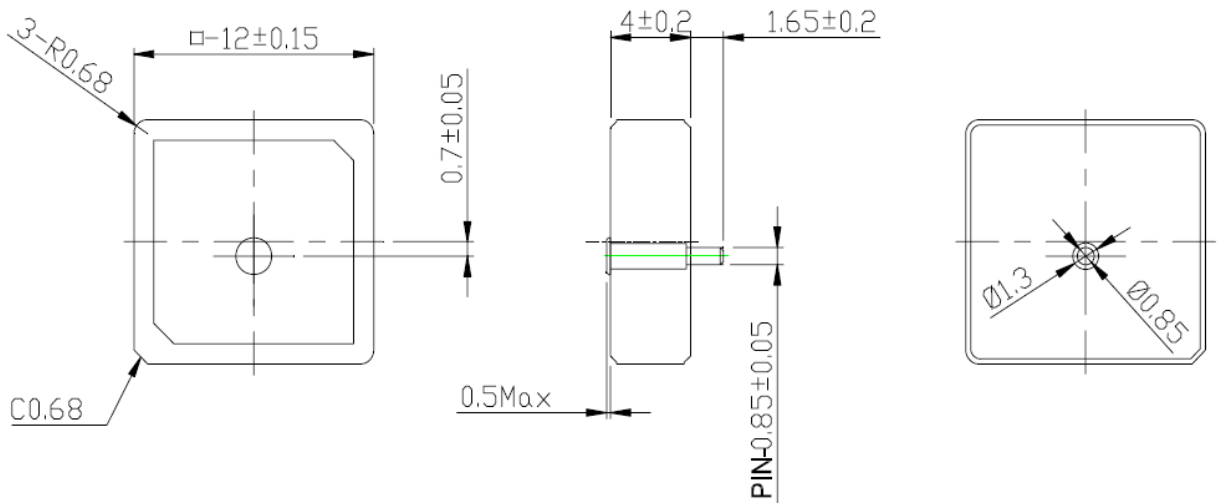
Original Patch Specification tested on 50mm² ground plane

No	Parameter	Specification
1	Center Frequency	1575MHz +/- 3MHz
2	Impedance	50Ω
3	Bandwidth	6 MHz min Return Loss <-10dB
4	VSWR	1.5 max
5	Gain toward Zenith	-0.5 dBic typ.
6	Gain at 10°Elevation	-----
7	Axial Ratio	4dB Max.
8	Polarization	Right Hand Circular Polarization
9	Frequency Temperature Coefficient (Tf)	0 ± 20ppm/°C
10	Operating Temperature	-40°C to +85°C

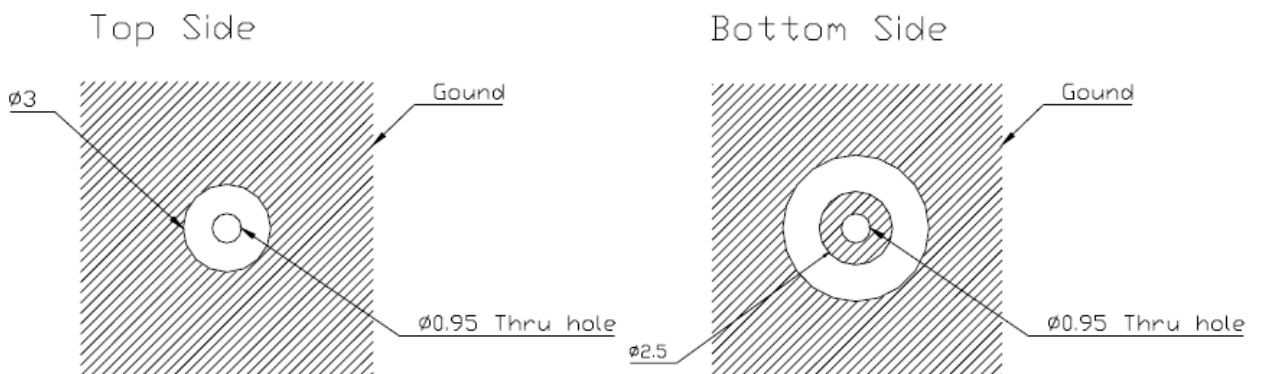


3.0 Mechanical Specifications

3.1 Shape and Dimension



3.2 Layout



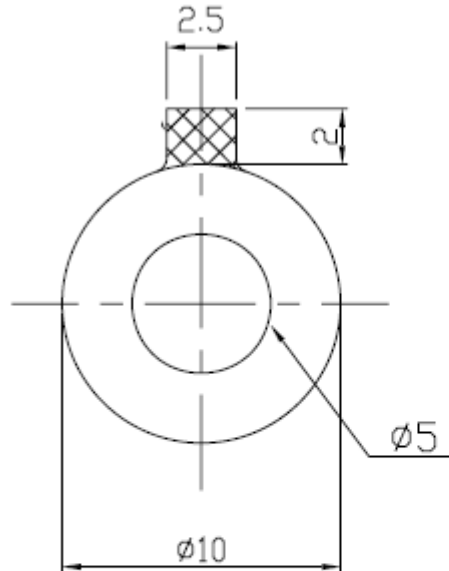
TOL: ± 0.20

UNIT: mm



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3.3 Tape Dimension

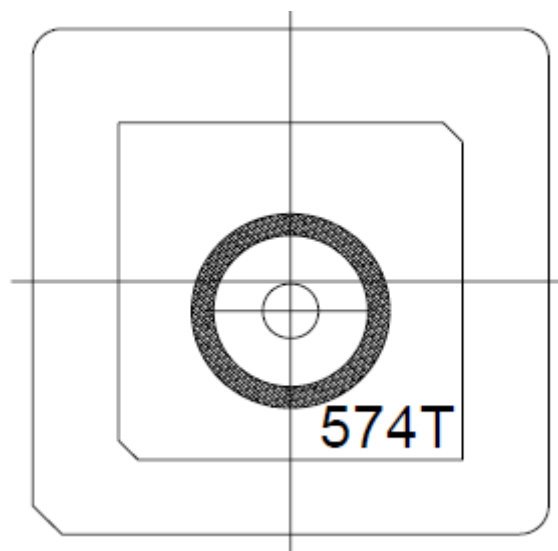


1. tesa : NO.4972

2. Double Sided Very Thin Filmic Tape

3. Thickness : 0.05mm

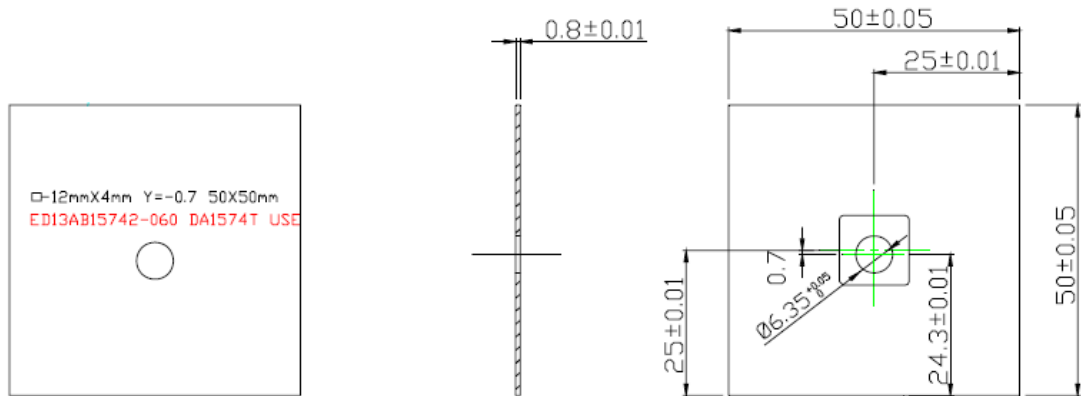
3.4 Mark





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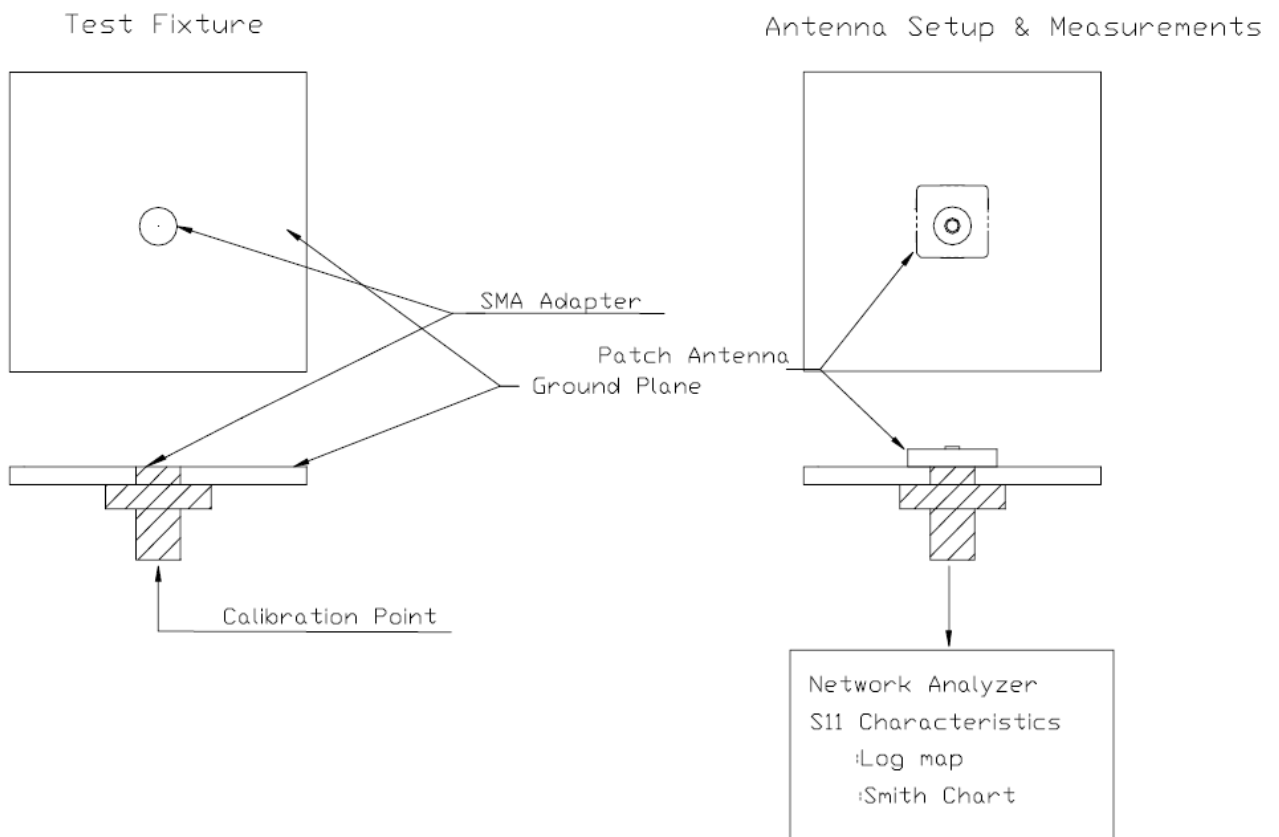
3.5 Test Jig and Dimension



BOTTOM-SIDE

TOP-SIDE

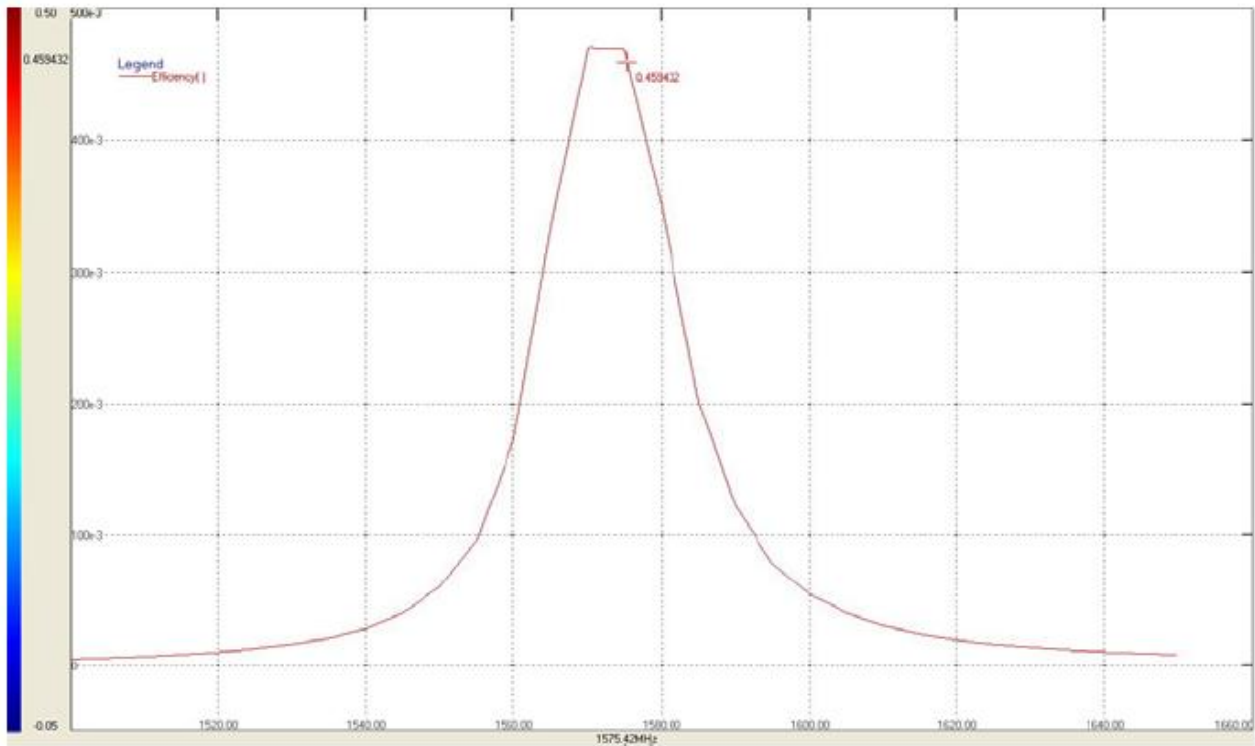
3.6 Test Fixture Antenna Setup and Measurements





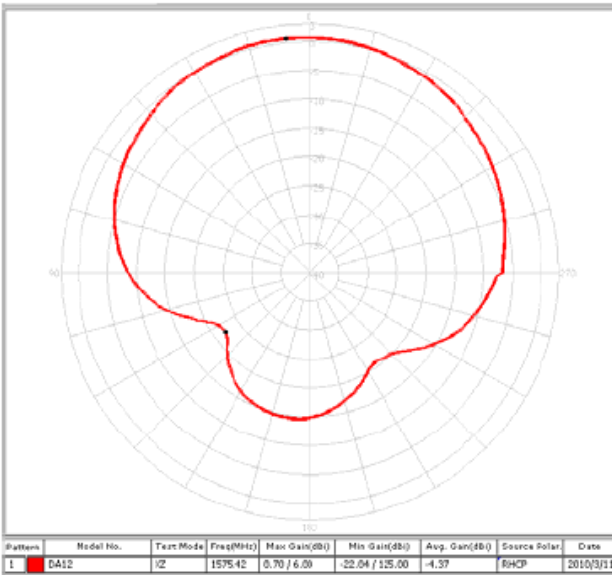
4.0 Performance testing and results

4.1 Efficiency

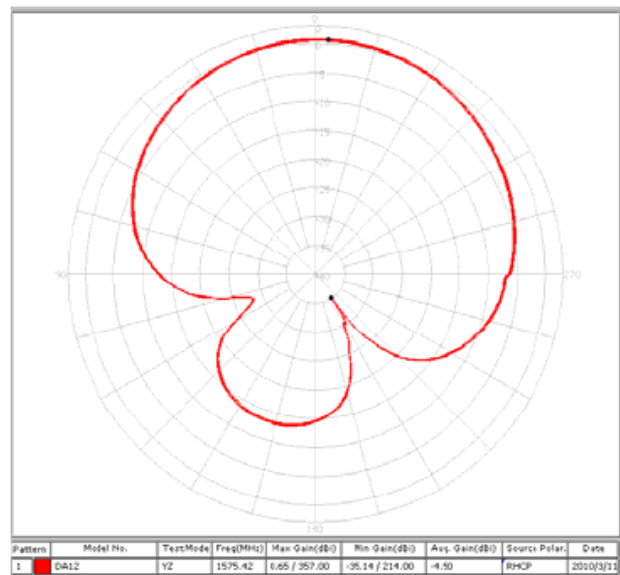




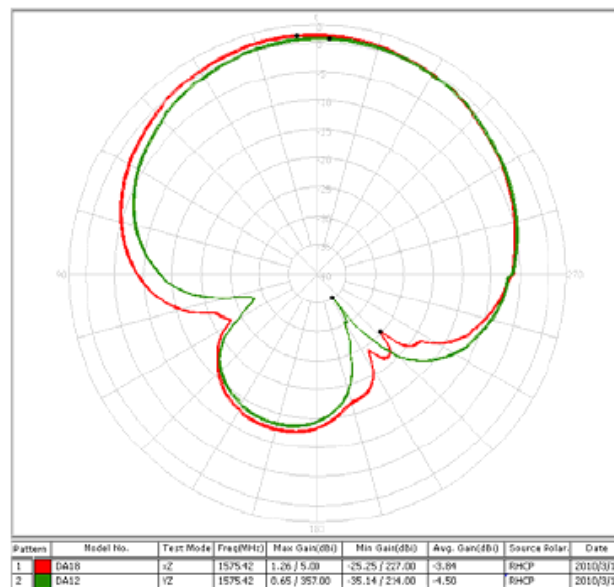
4.2 Antenna Gain



XZ-Plane



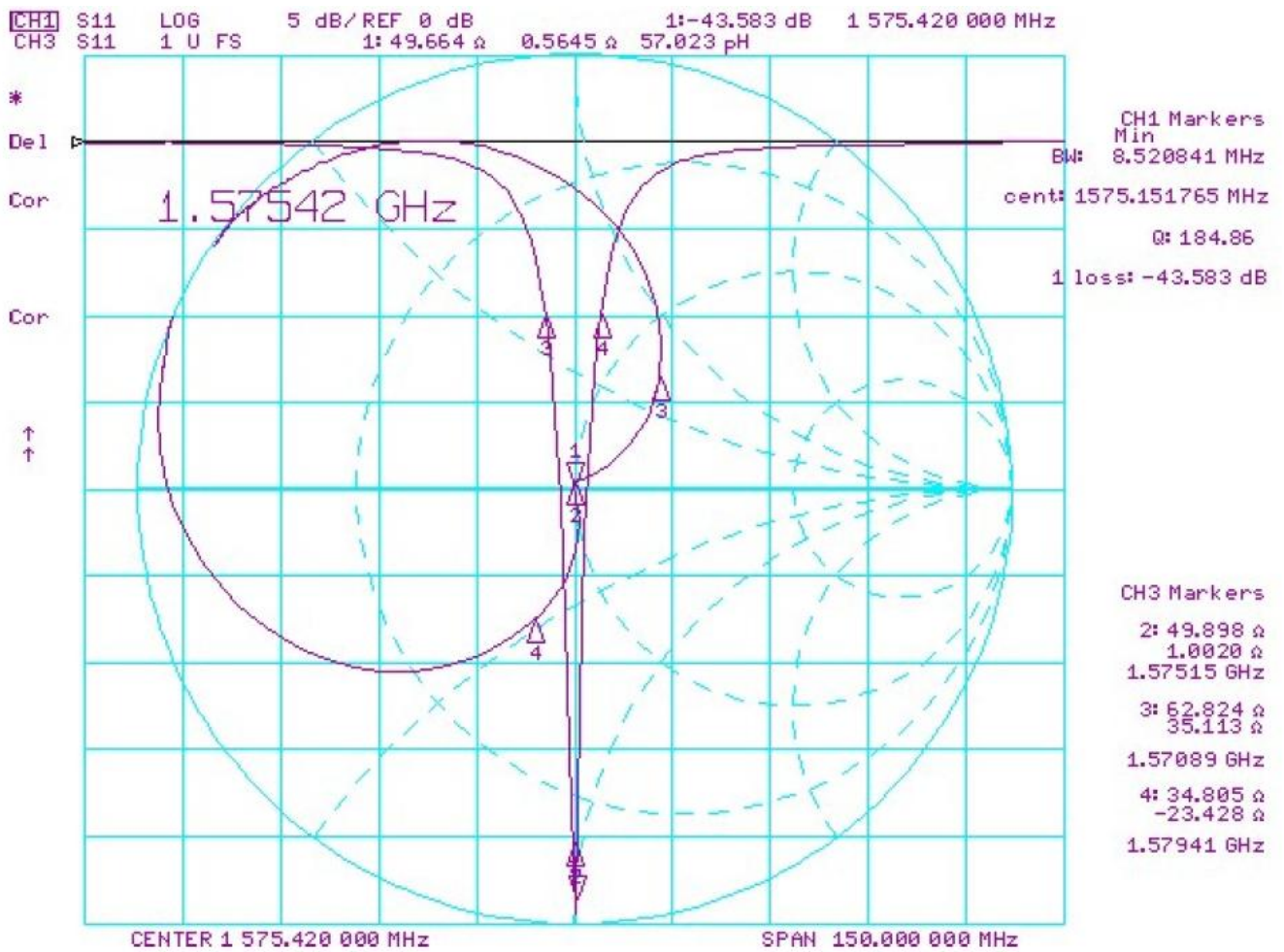
YZ-Plane



XY-Plane



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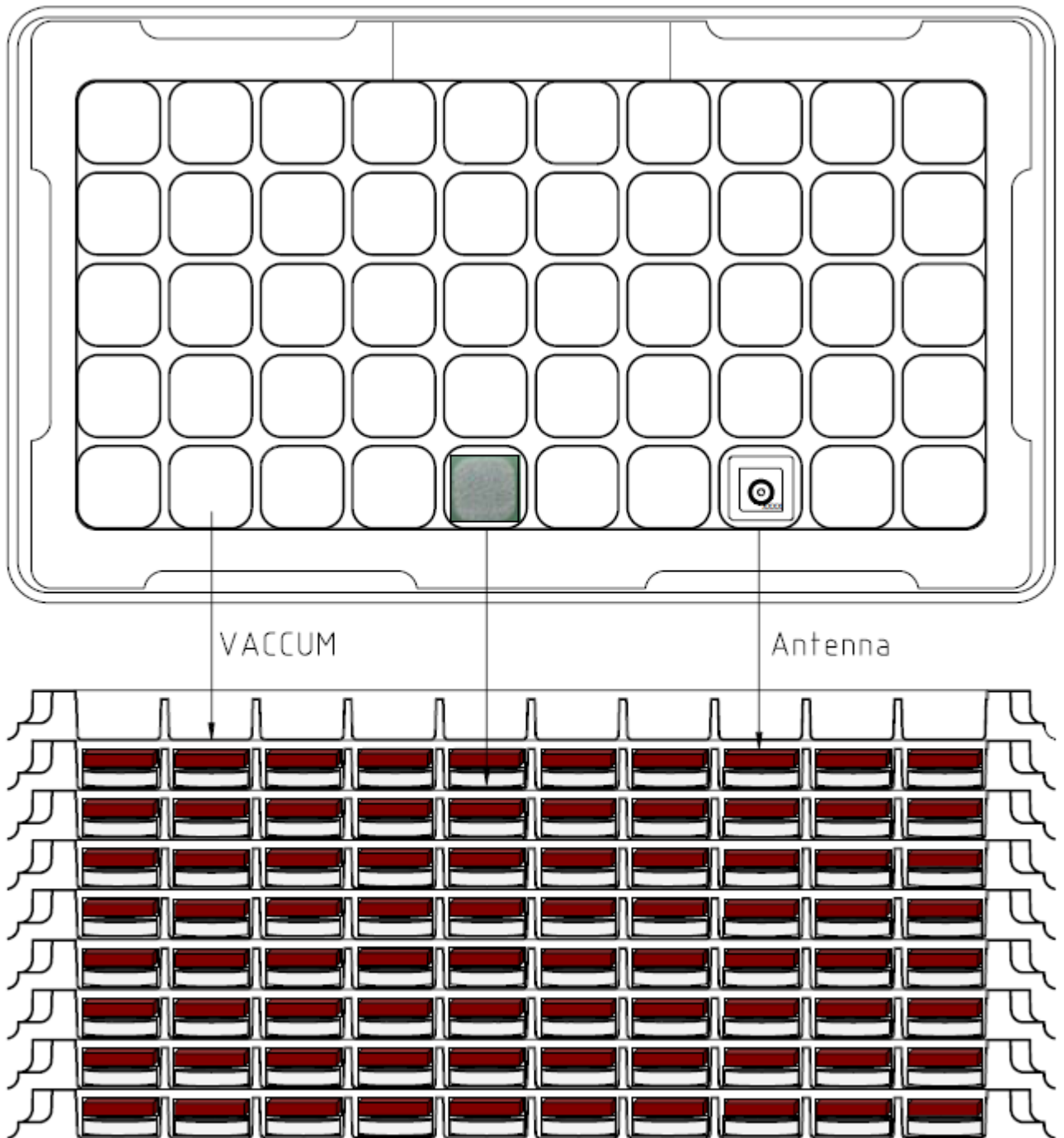
4.1 Precautions for Use

- Antenna pattern use a silver electrode.
- Please don't use the corrosion gas (sulfur gas, chlorine gas) in the atmosphere.
- Please don't direct solder onto the silver electrode of Antenna pattern.



5.0 Packaging

Pieces per Inner Carton: 400



V



Specification

Packing

