



Specification

SPECIFICATION

Part No. : **GP.1575.18.2.A.02**

Specification No : DA1574S

Product Name : **2mm thick GPS Patch Antenna, 1575MHz**

Features : 18mm*18mm*2mm
Halogen Free
ROHS Compliant

:



REVISION STATUS

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



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

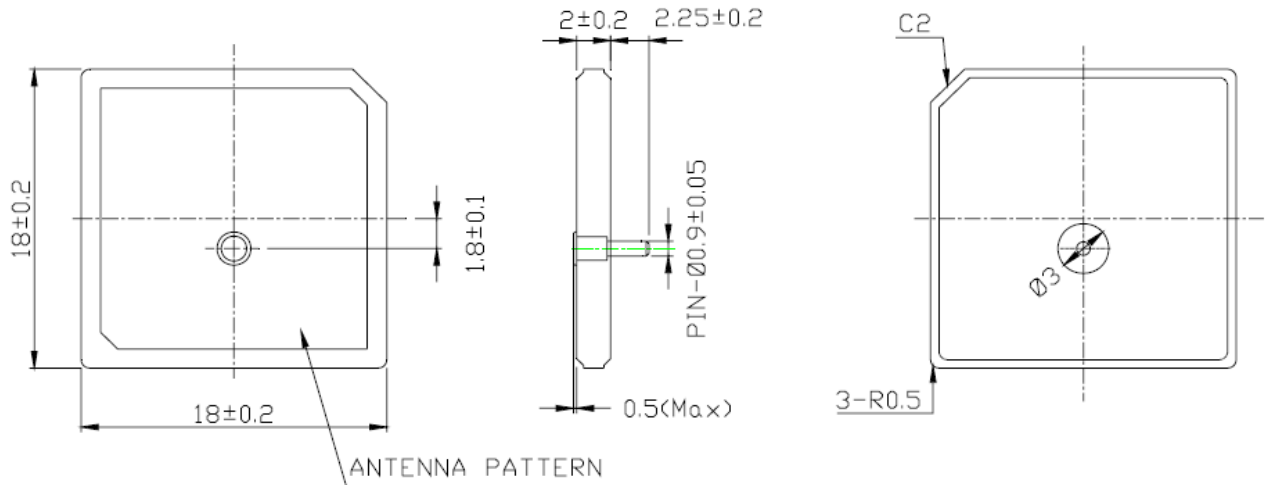
Original Patch Specification tested on 50mm² ground plane

No	Parameter	Specification
1	Center Frequency	1575MHz +/- 3MHz
2	Impedance	50Ω
3	Bandwidth	5 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	3dB Max.
8	Polarization	Right Hand Circular Polarization
9	Frequency Temperature Coefficient (Tf)	0 ± 20ppm/°C
10	Operating Temperature	-40°C to +85°C

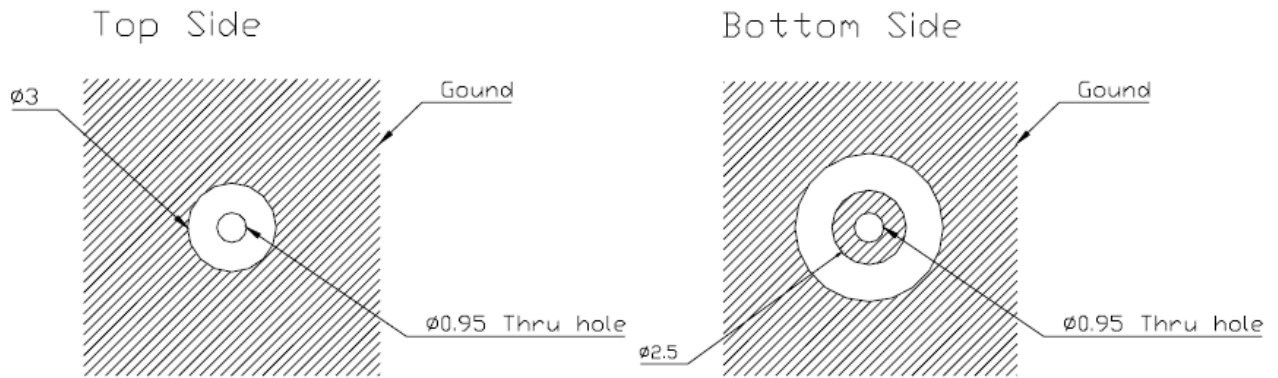


3.0 Mechanical Specifications

3.1 Shape and Dimension



3.2 Layout

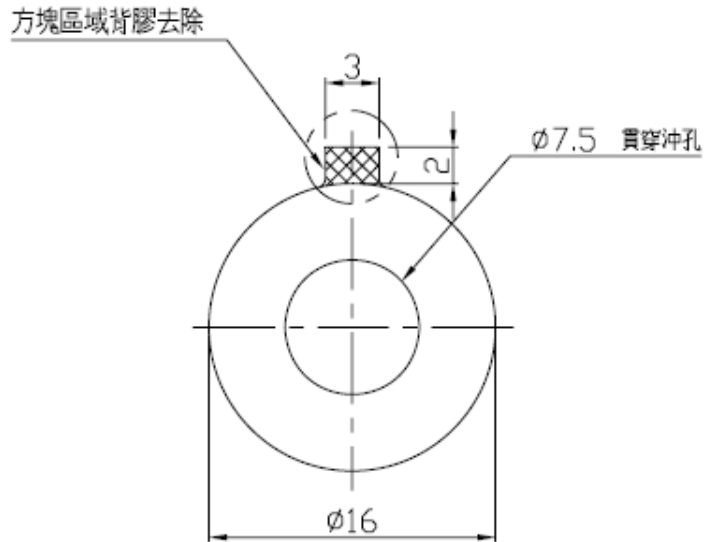


TOL: ± 0.20
UNIT: mm



Specification

3.3 Tape Dimension

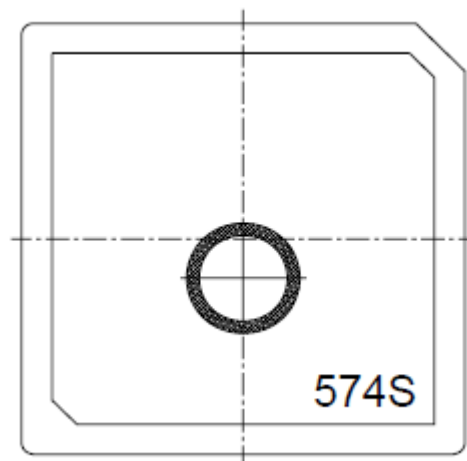


備註：1.NITTO :N0.5015

2.Double-coated adhesive tape for industrial use

3.Thickness :0.12mm

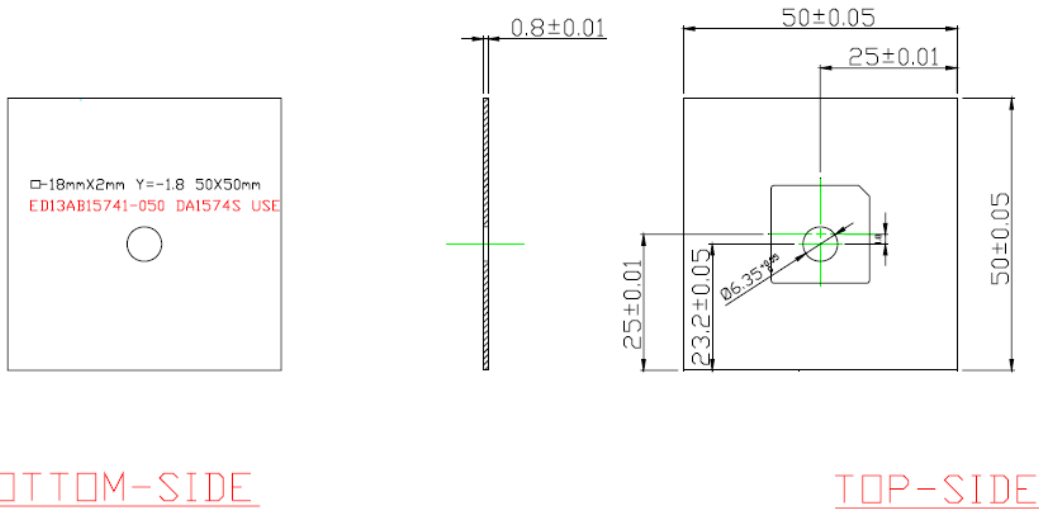
3.4 Mark





Specification

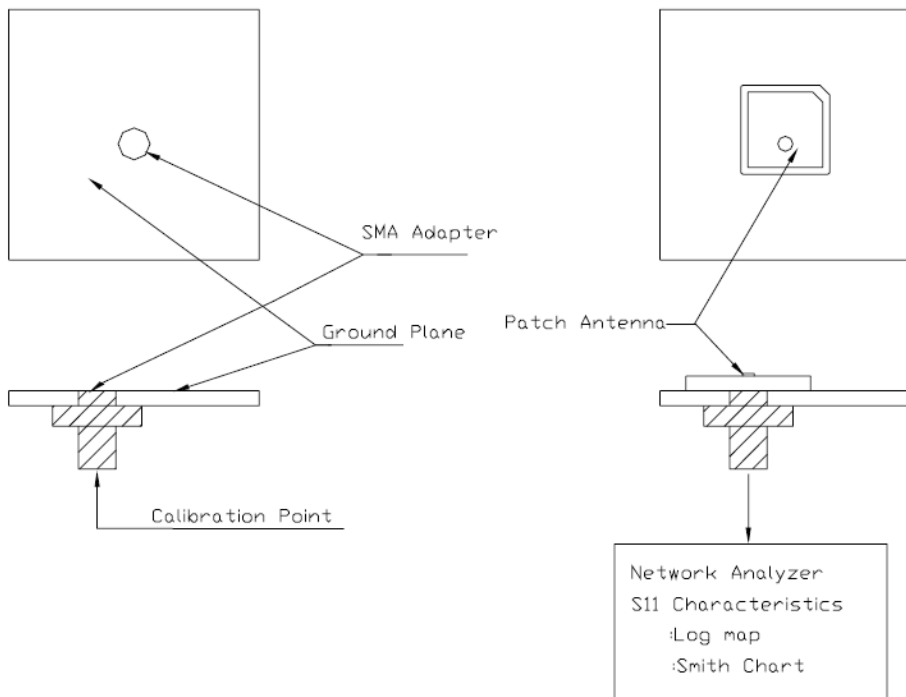
3.5 Test Jig and Dimension



3.6 Test Fixture Antenna Setup and Measurements

Test Fixture

Antenna Setup & Measurements

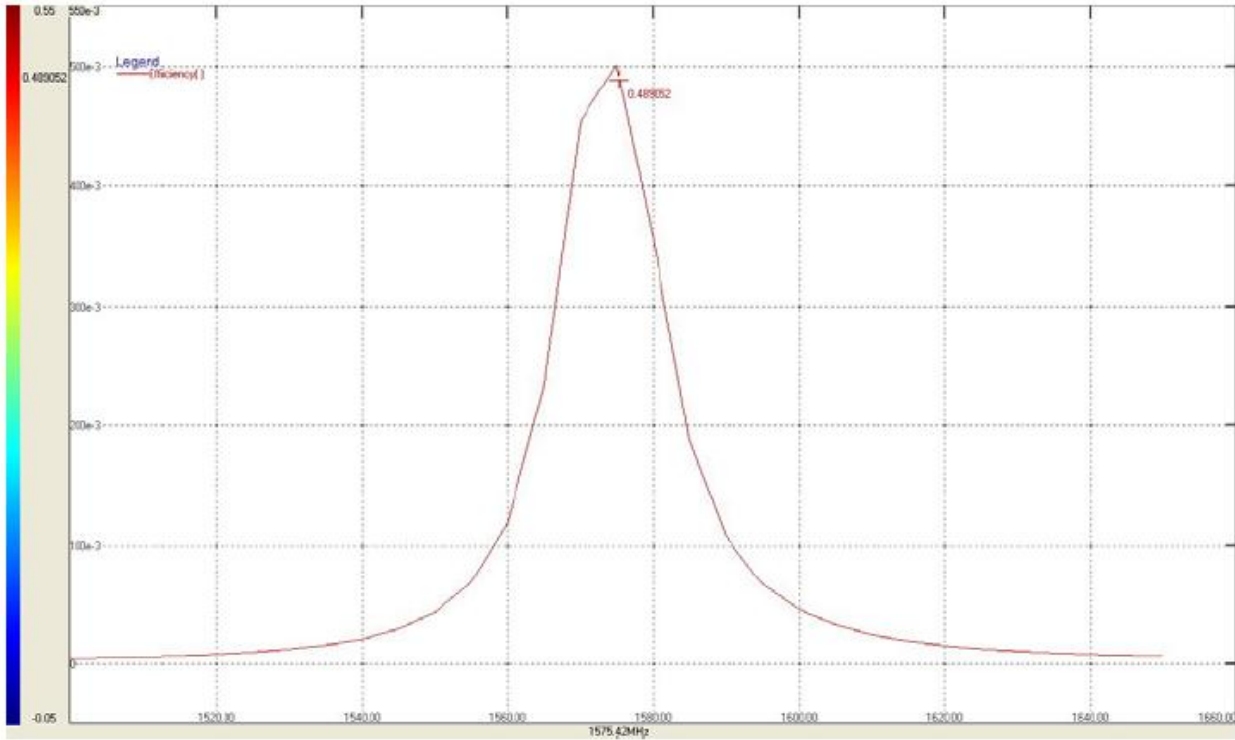




Specification

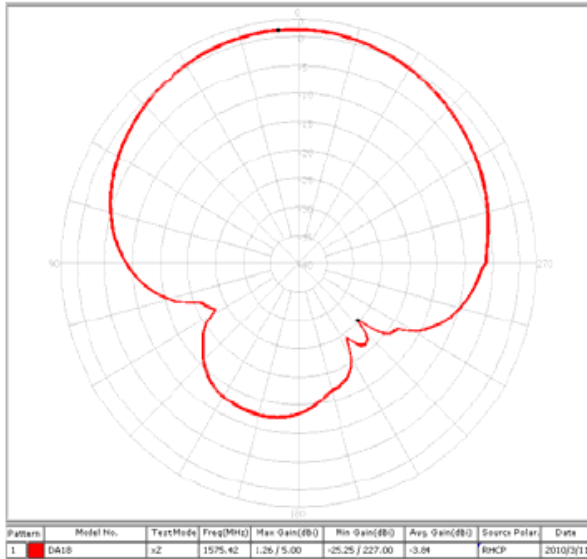
4.0 Performance testing and results

4.1 Efficiency

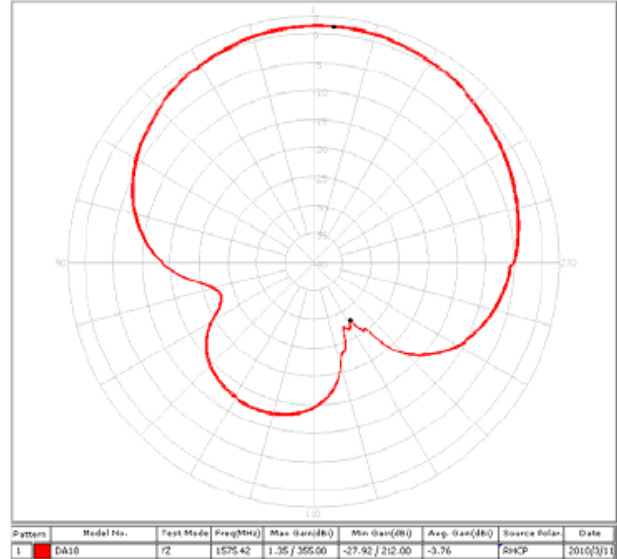




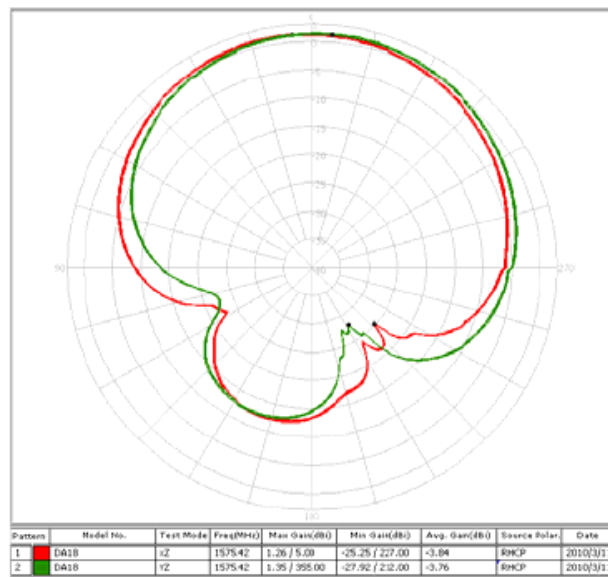
4.2 Antenna Gain



XZ-Plane



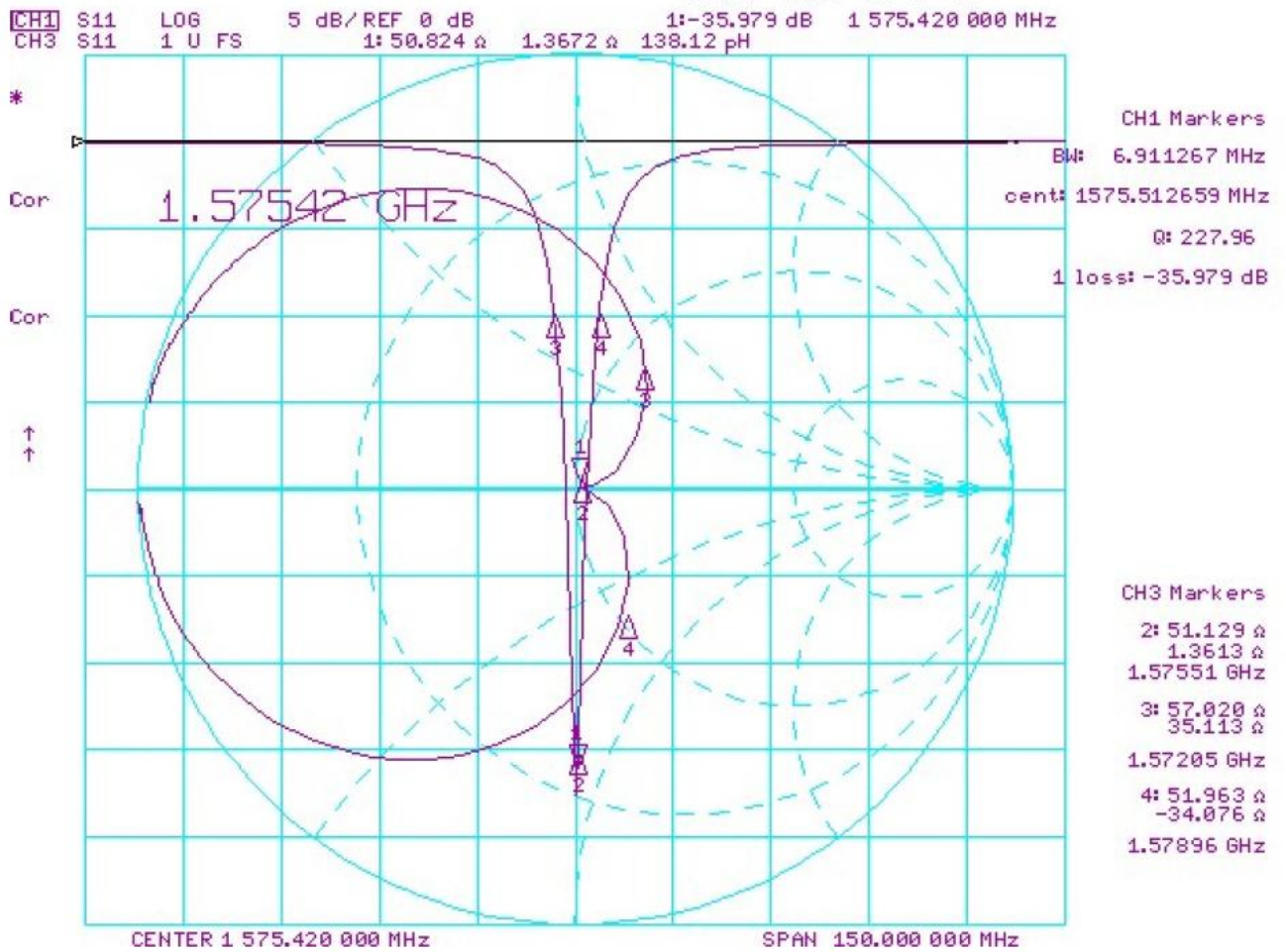
YZ-Plane



XY-Plane



Specification



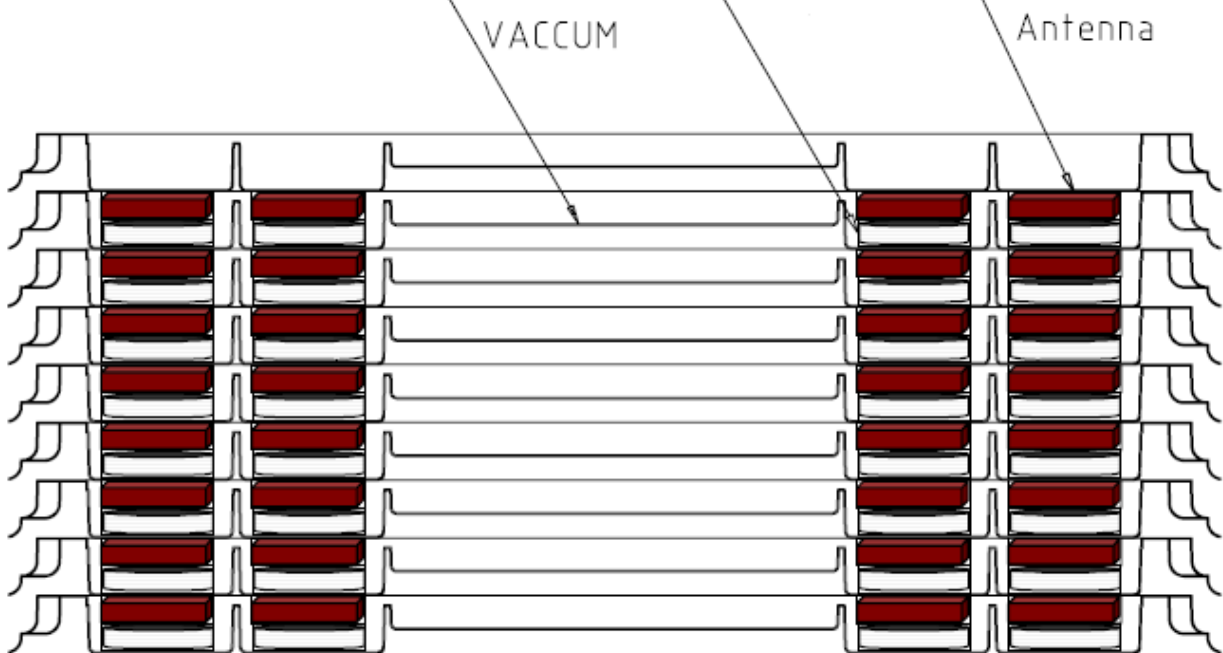
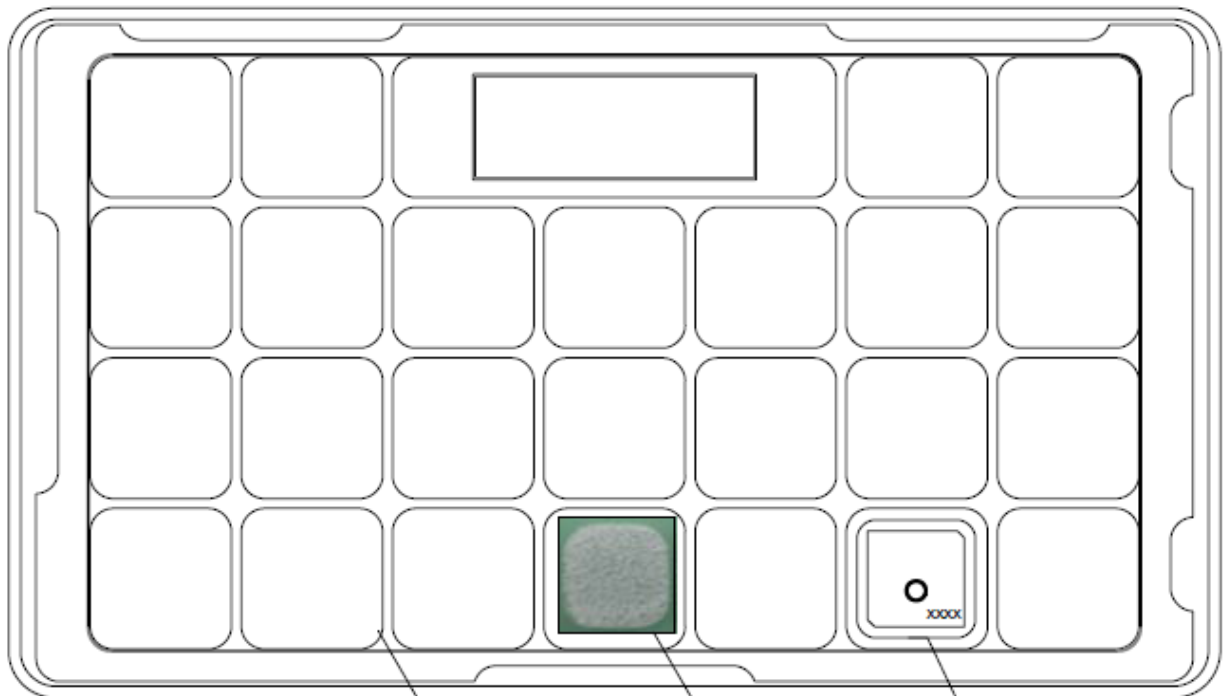
4.1 Precautions for Use

- 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: 200



V



Specification

Packing

