

SPECIFICATION

Part No.	: CGGP.25.4.A.02
Product Name	: 4mm thick GPS/GLONASS Patch Antenna, 1575-1610MHz
Feature	: Wide-band Operation 25*25*4mm 5dBi Peak Gain (on 70mm*70mm ground-plane) Pin type Automotive TS16949 Production and Quality Approved RoHS compliant



1. Introduction

This 25 mm ceramic GPS/Glonass patch antenna, by means of a double resonance design, has unique wide-band operation over the whole operating bands of GPS and Glonass systems from 1575MHz to 1610MHz. It is mounted via pin and double-sided adhesive.

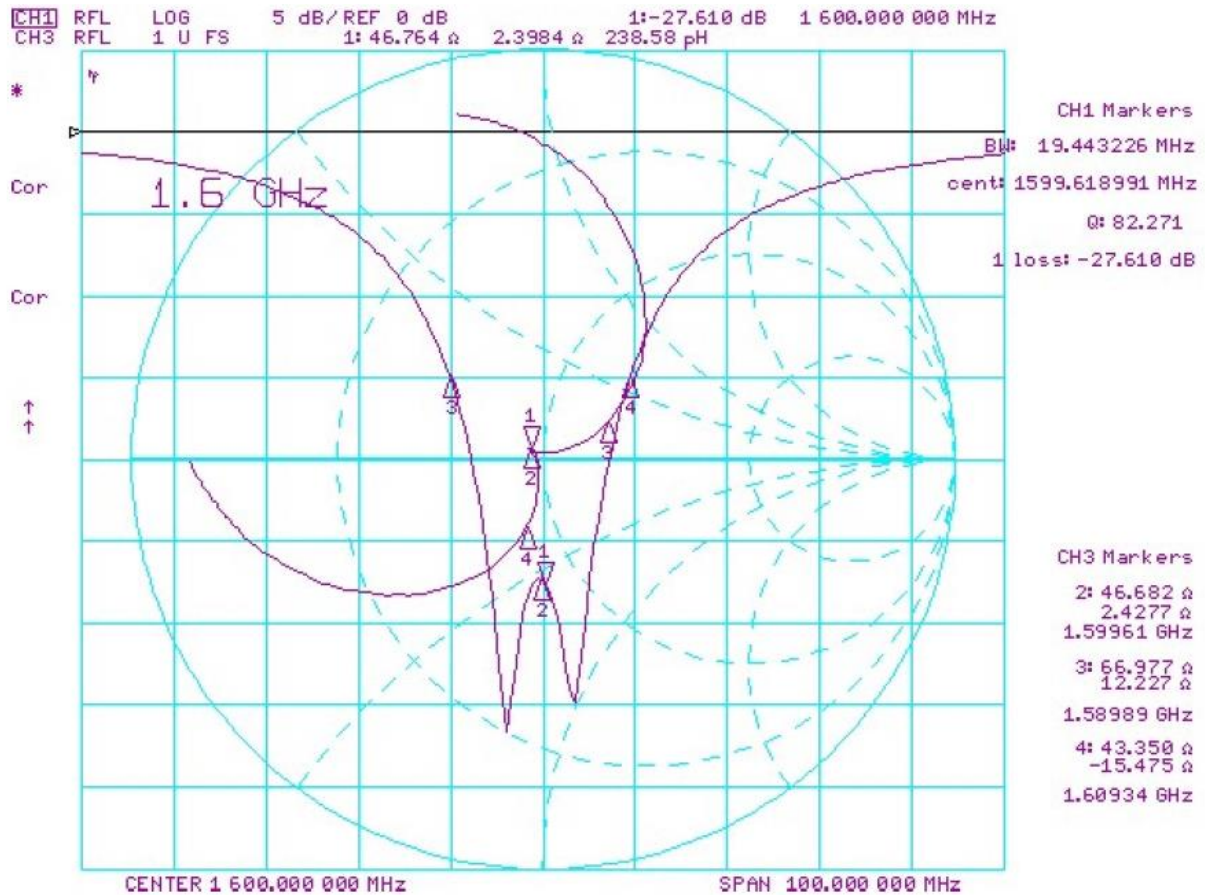
This antenna has been tuned for a centre position on a 70mm*70mm ground-plane. It is manufactured and tested in a TS16949 first tier automotive approved facility. For further optimization to customer specific device environments where positioning is off centre or on different ground-plane sizes, custom tuned patch antennas can be supplied. For more details please [Contact Us](#).

2. Specification

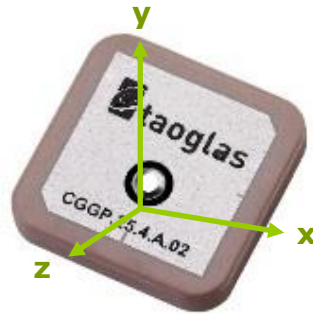
ELECTRICAL	
Center Frequency	1600MHz $\pm$ 3MHz
Bandwidth	15 MHz min Return Loss <-10dB
VSWR	1.5 max
Gain at Zenith	+5.0 dBi typ.
Gain at 10° Elevation	-1.0 dBi typ.
Impedance	50 ohms
MECHANICAL	
Ceramic Dimension	25.1 x 25.1 x 4mm
Pin Diameter	0.9mm
Pin Length	1.8mm
ENVIRONMENTAL	
Operation Temperature	-40°C to 105°C
Humidity	Non-condensing 65°C 95% RH

* Antenna properties were measurement with the antenna mounted on 70mm*70mm
Ground Plane
Taoglas Part # CGGPD.25.A

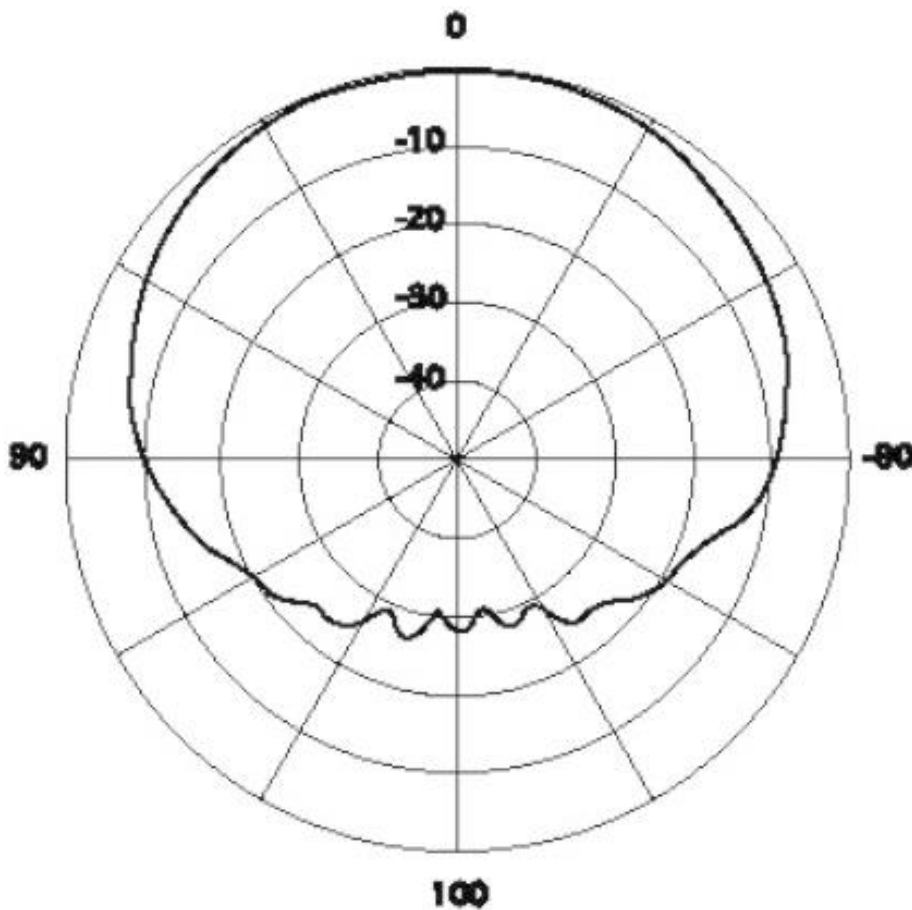
3. Antenna S11 Properties



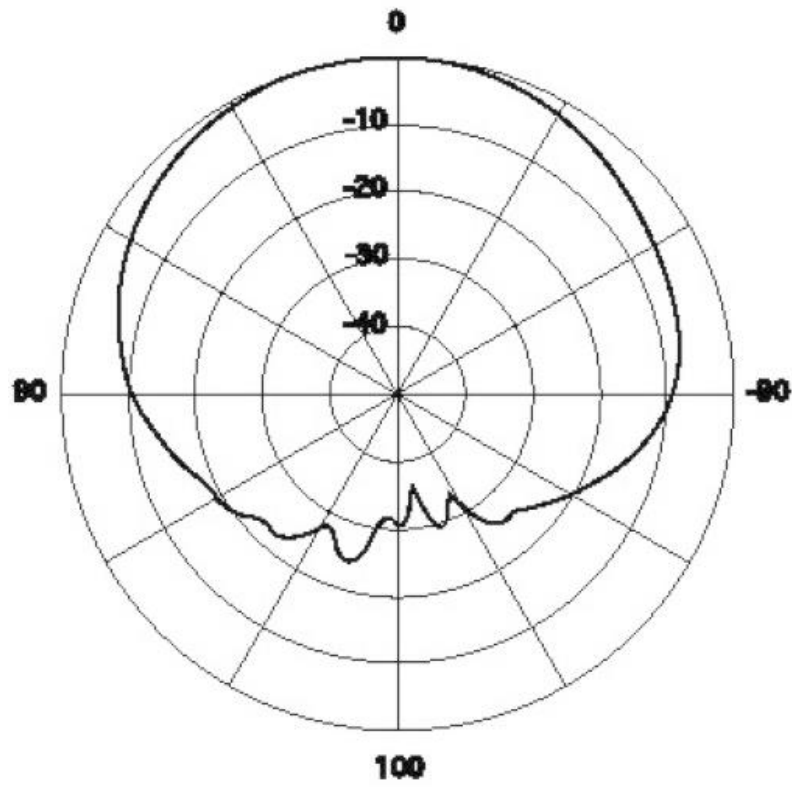
4. Antenna Radiation Properties



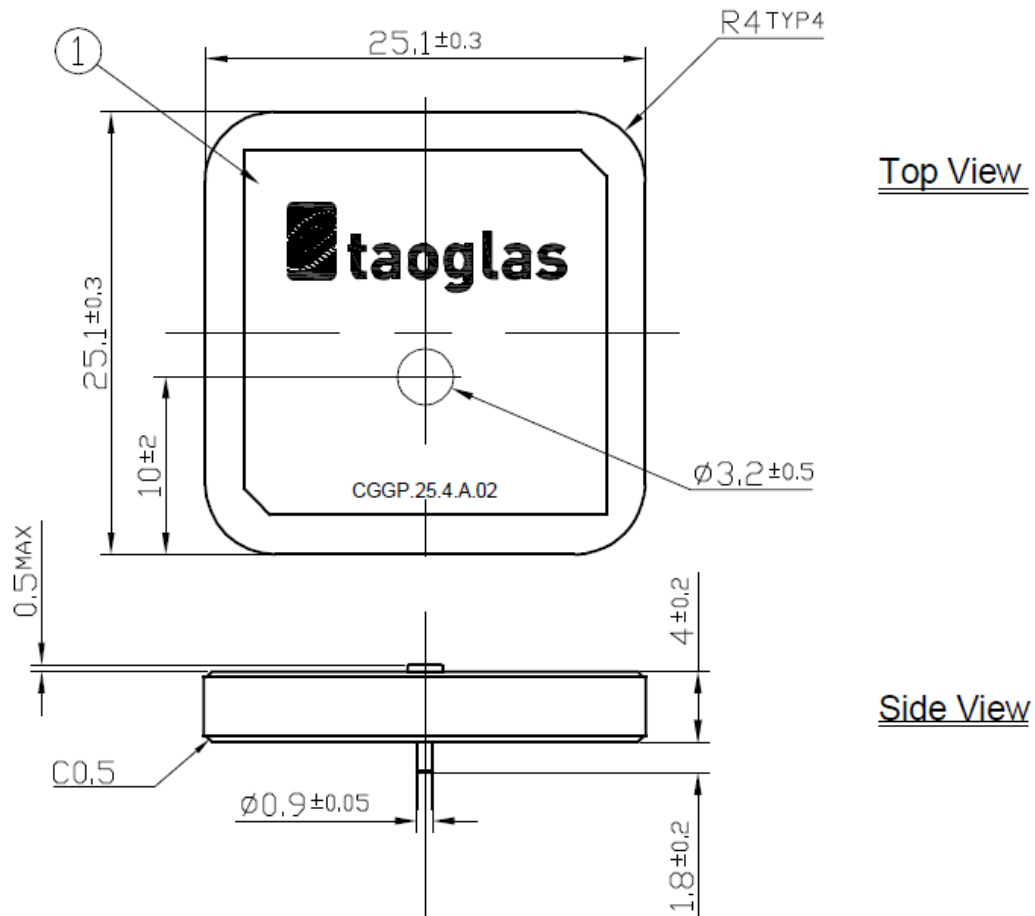
4.1. XZ – Plane Radiation

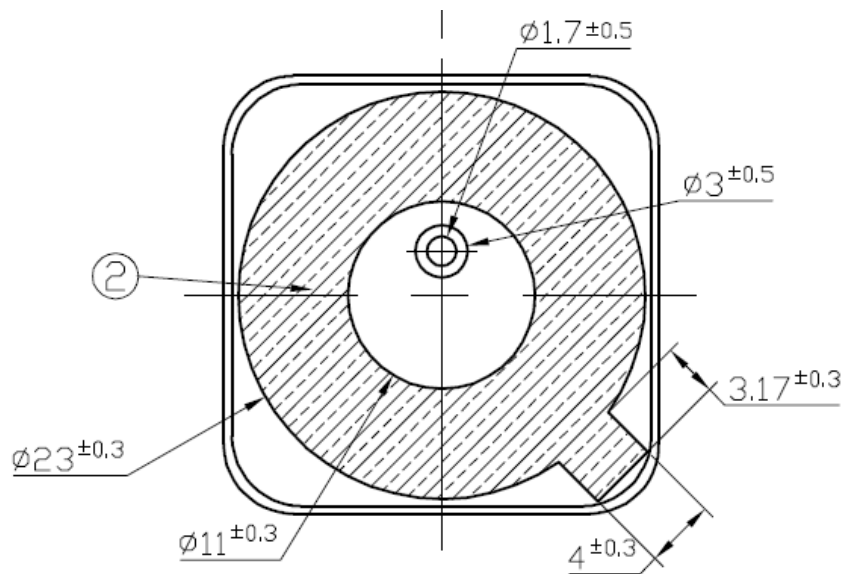


4.2. YZ- Plane Radiation

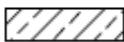


5. Mechanical Drawing



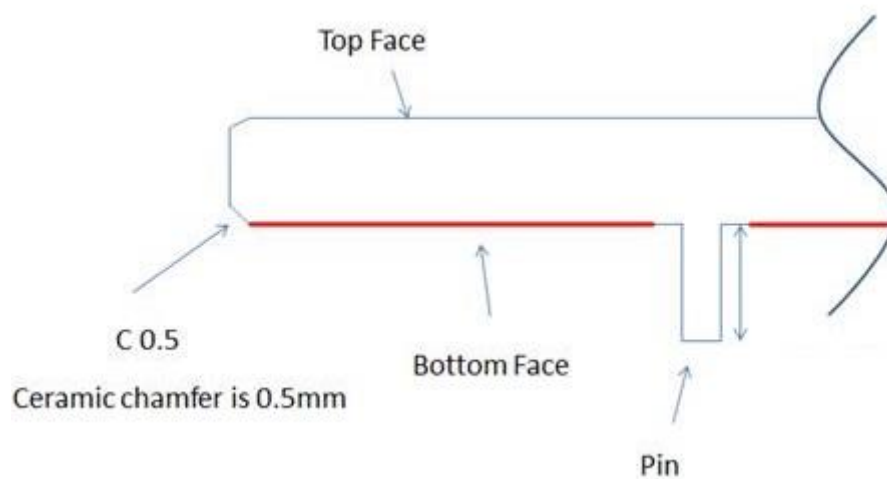


NOTES:

1. Double sided adhesive area. 

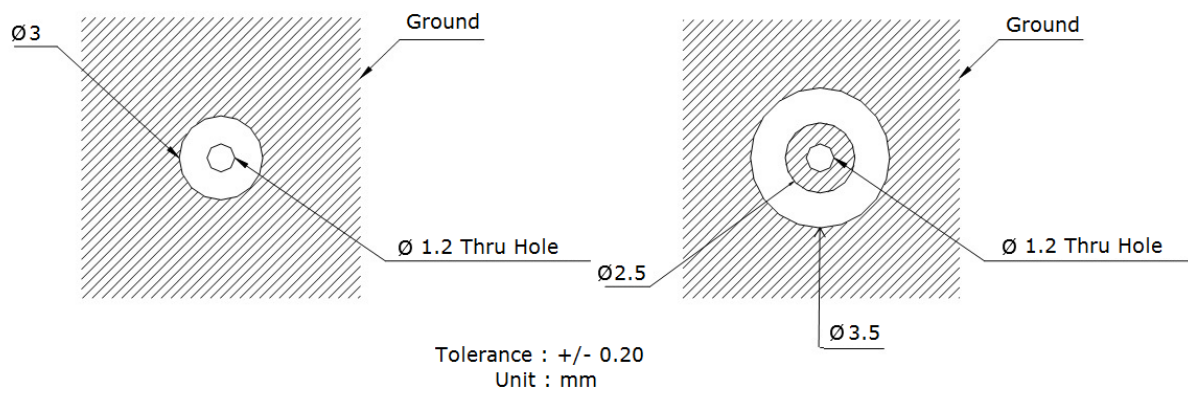
Unit : mm

5.1 Adhesive Thickness

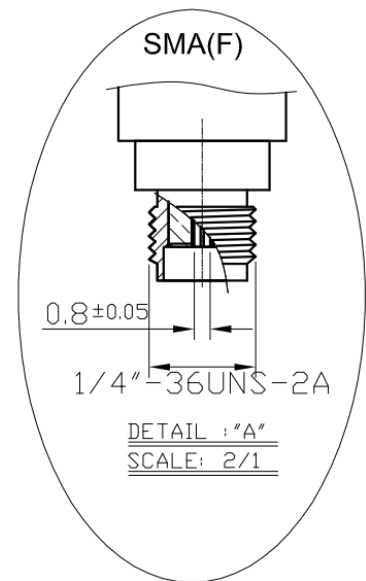
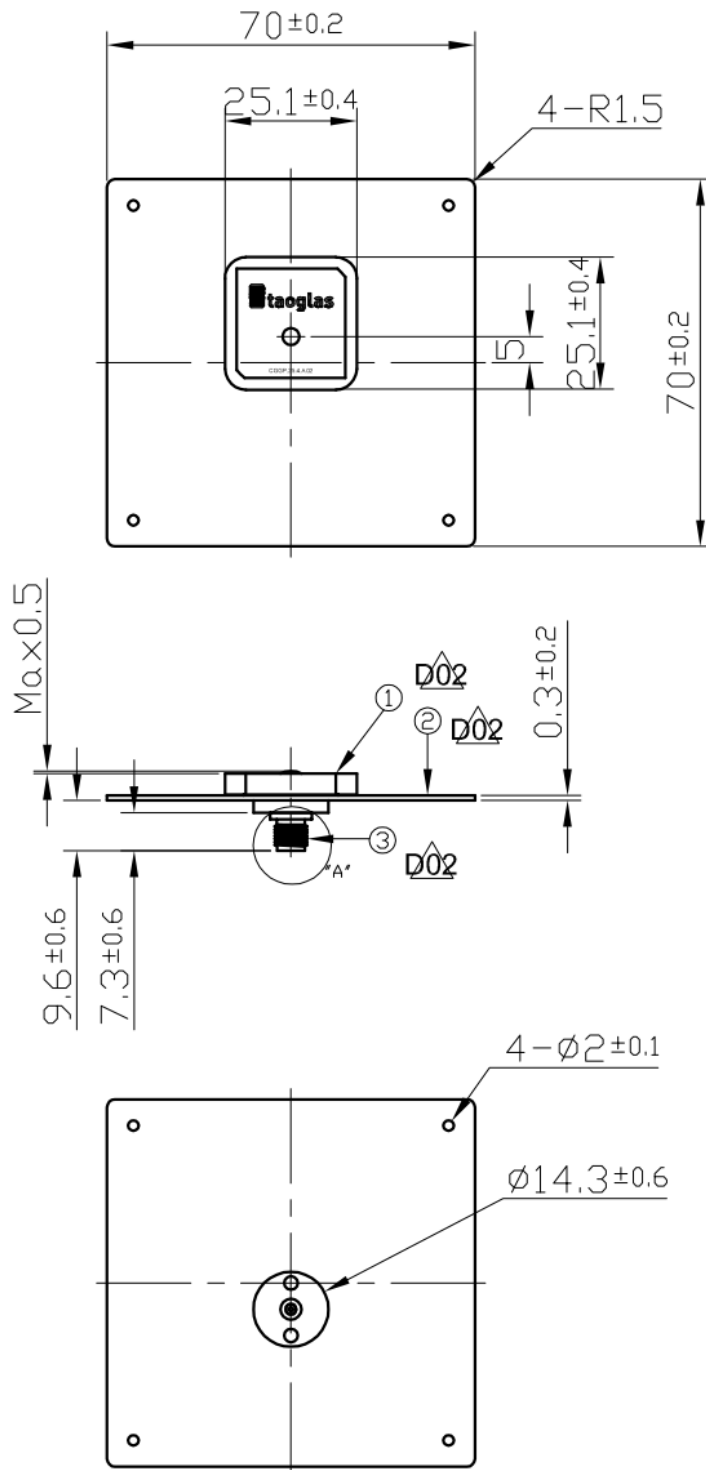


Red Line shows the adhesive without Liner – thickness 0.08~0.1mm

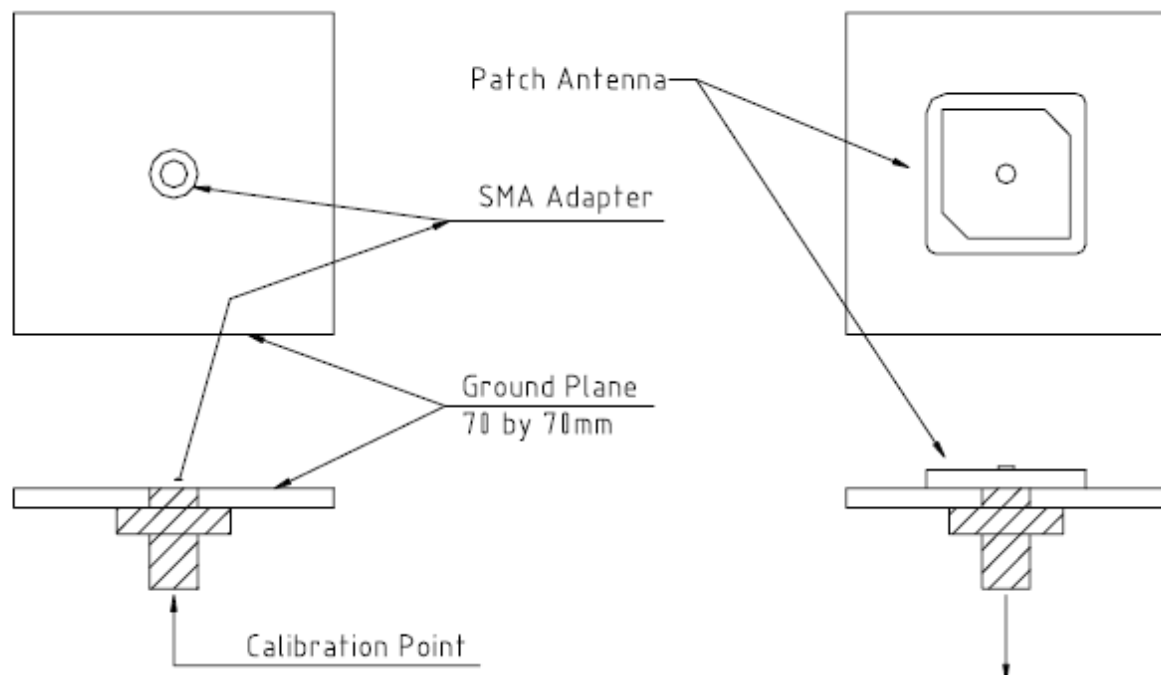
6. PCB Footprint Recommendation



7. Evaluation Board (CGGPD.25.A)

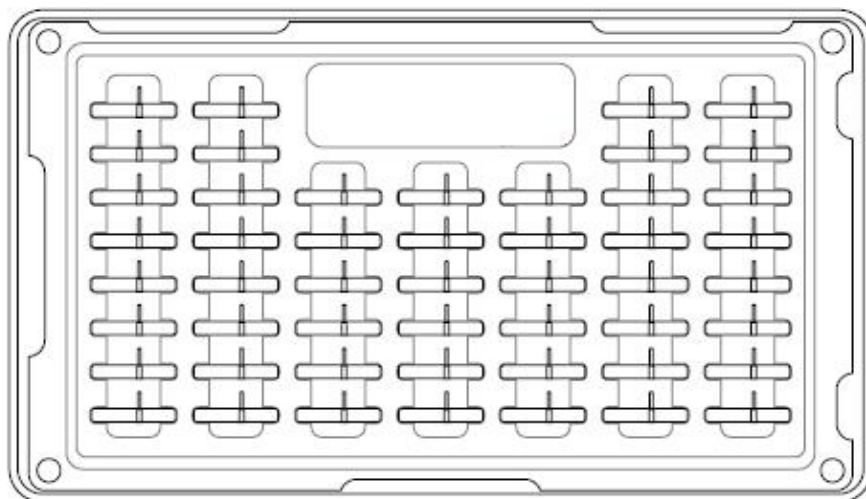


	Name	Finish	QTY
1	Patch(25x25x4mm)	Clear	1
2	Ground-Plane(70x70x0.3mm)	Ni Plated	1
3	SMA(F) ST	Gold	1



8. Packaging

8.1. Inner Tray



200 pieces per tray

8.2. Carton

