

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.

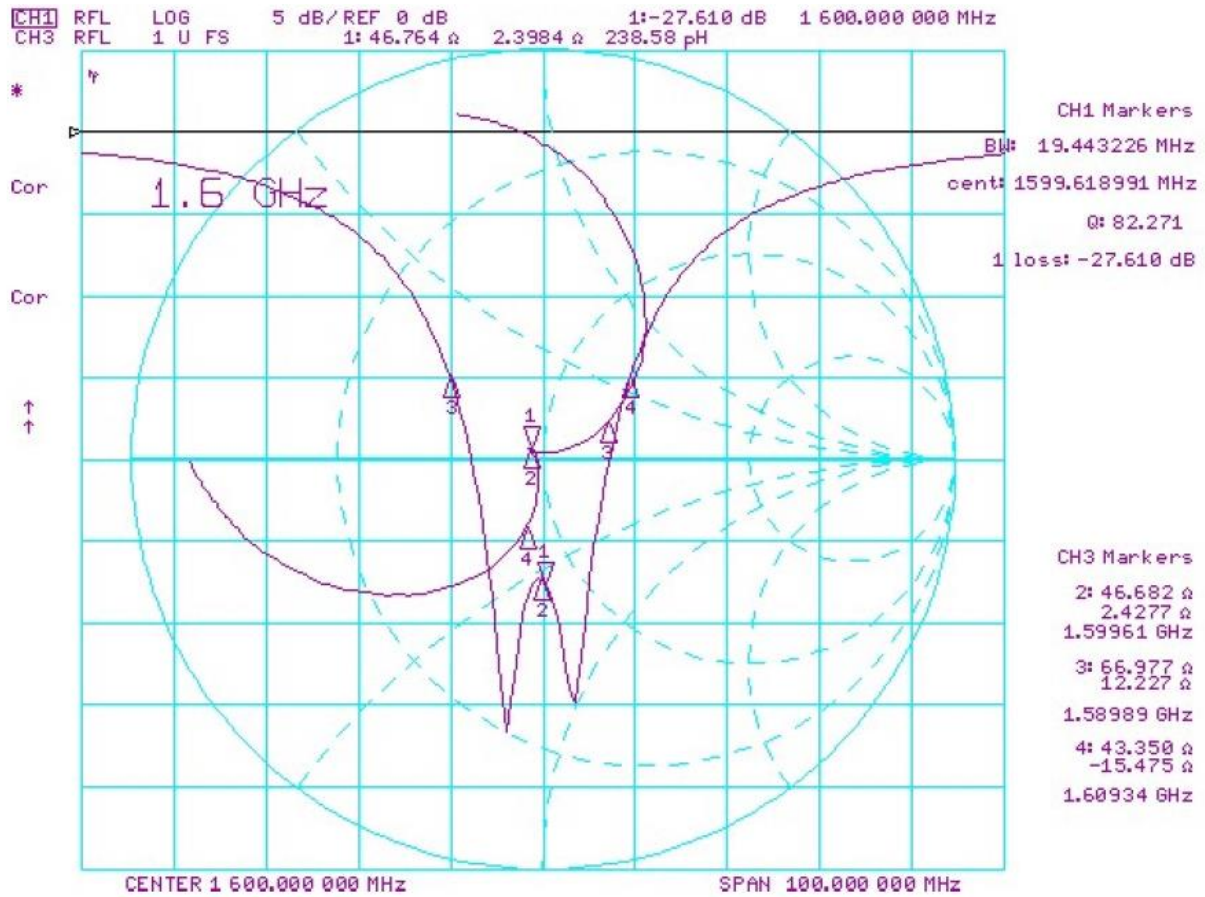
This antenna has been tuned for a centre position on a 70mm*70mm ground-plane. It is manufactured and tested in a TS16949 first tier automotive approved facility. For further optimization to customer specific device environments where positioning is off centre or on different ground-plane sizes, custom 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

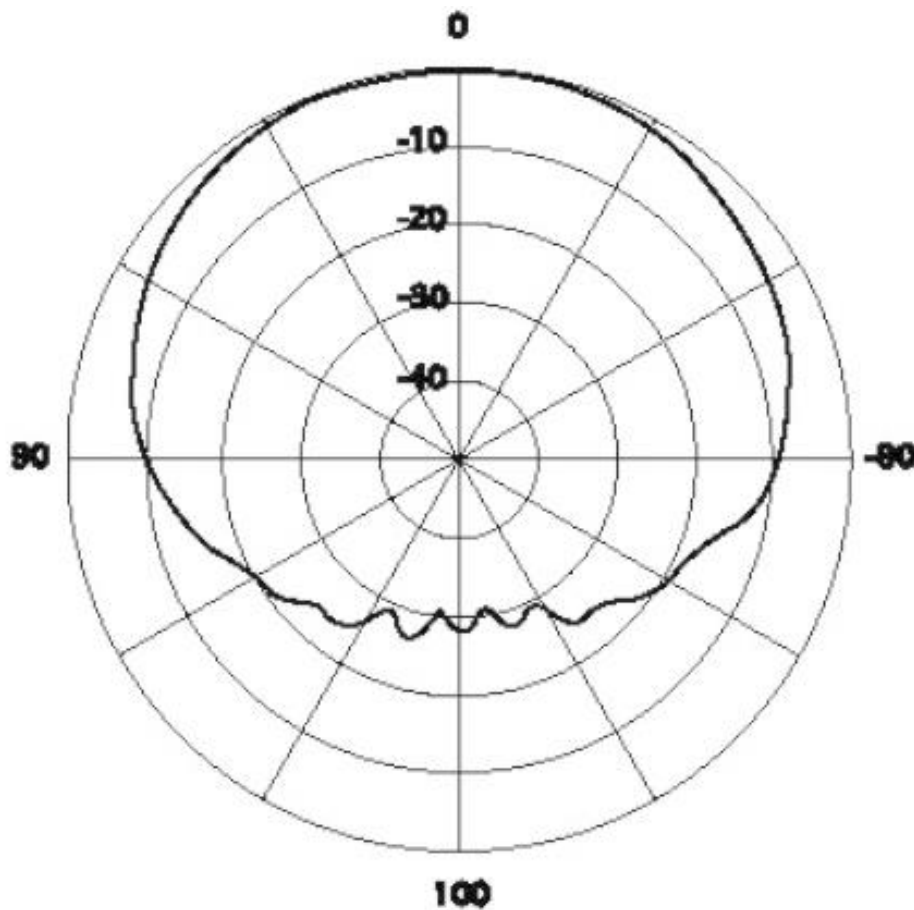
3. Antenna S11 Properties



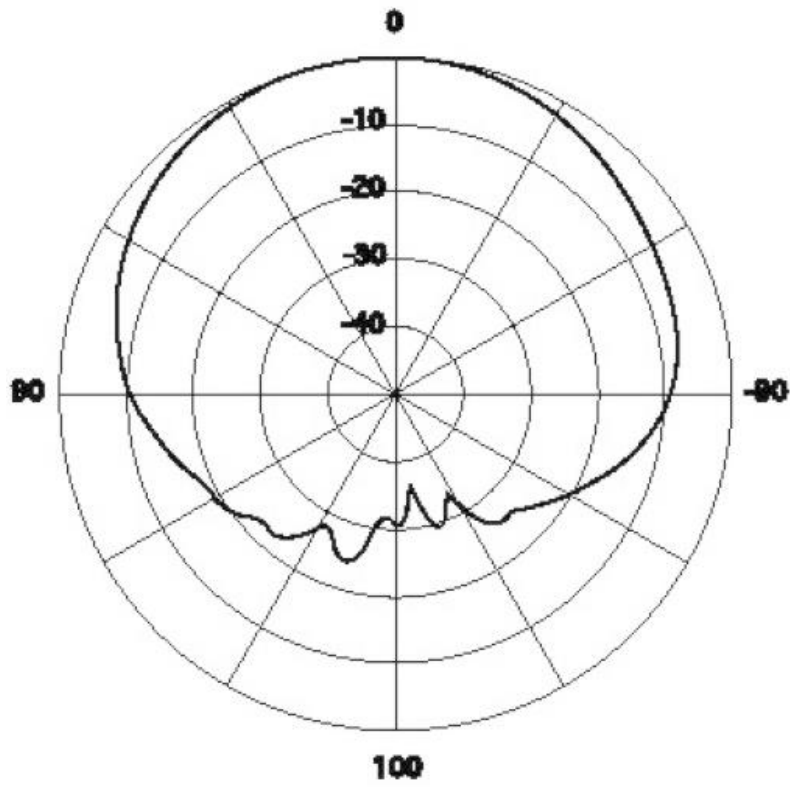
4. Antenna Radiation Properties



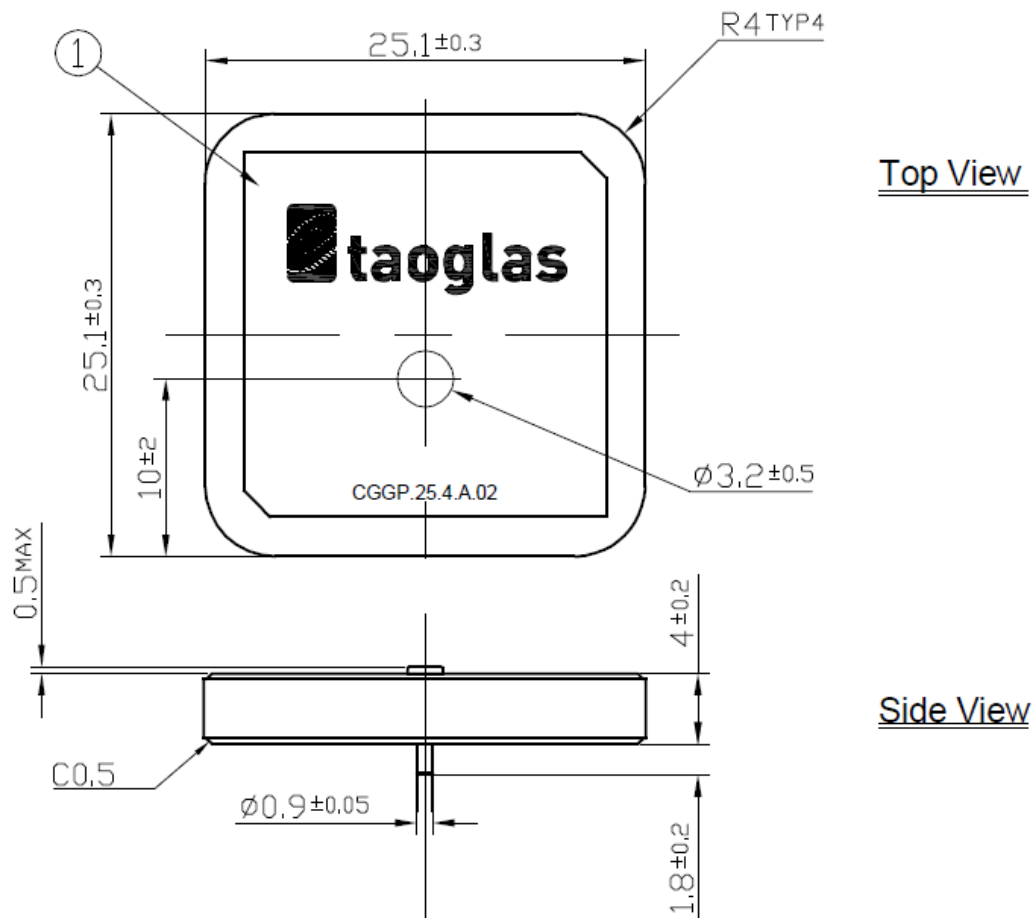
4.1. XZ – Plane Radiation

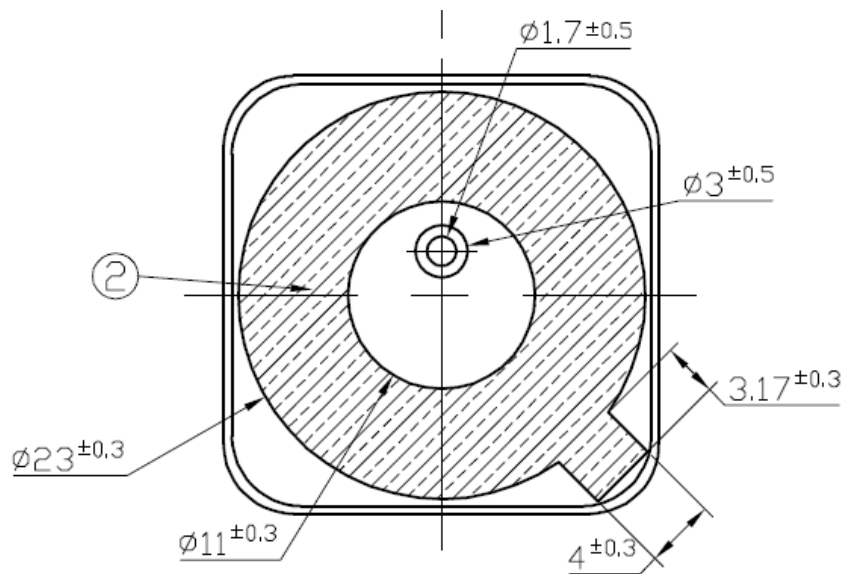


4.2. YZ- Plane Radiation

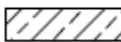


5. Mechanical Drawing



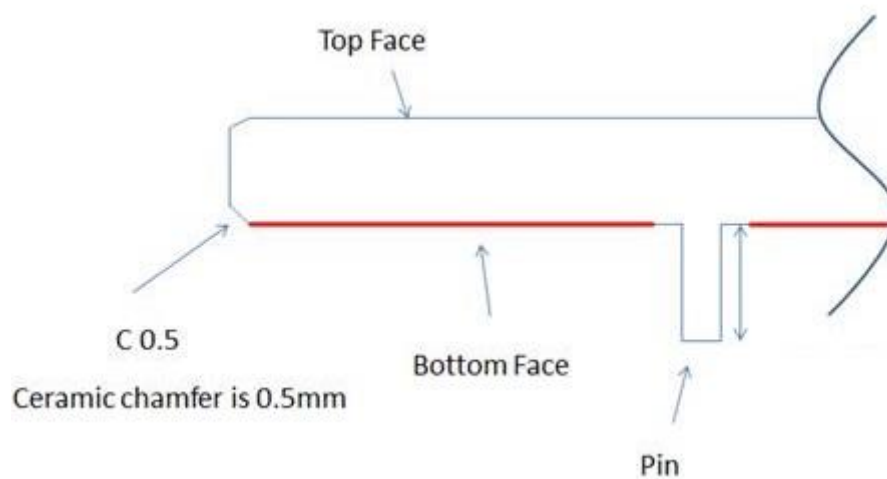


NOTES:

1. Double sided adhesive area. 

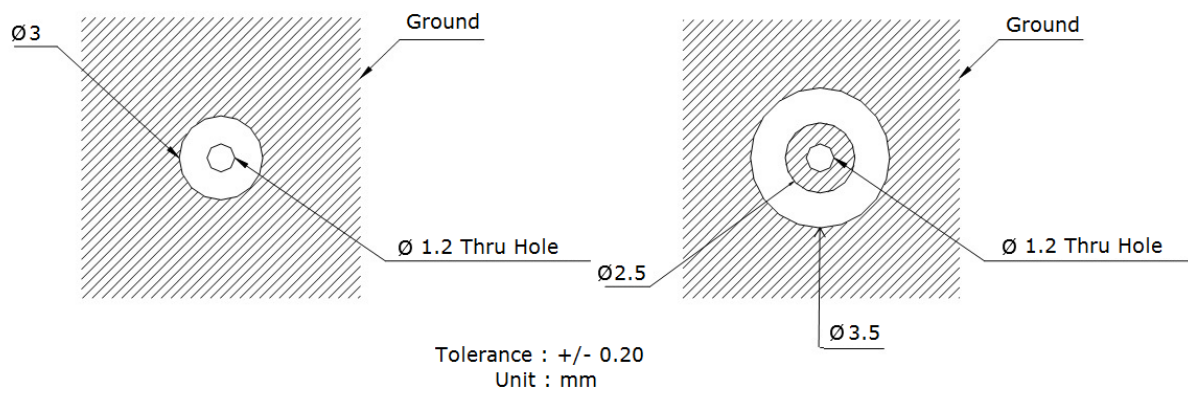
Unit : mm

5.1 Adhesive Thickness

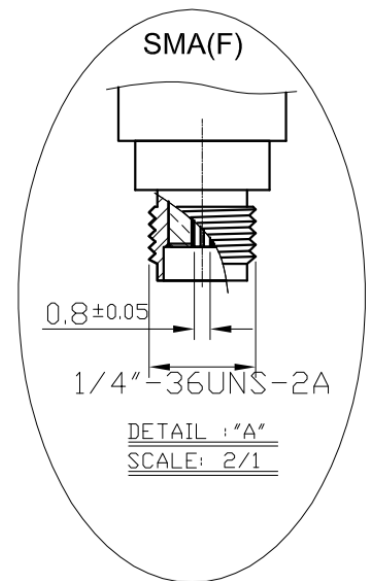
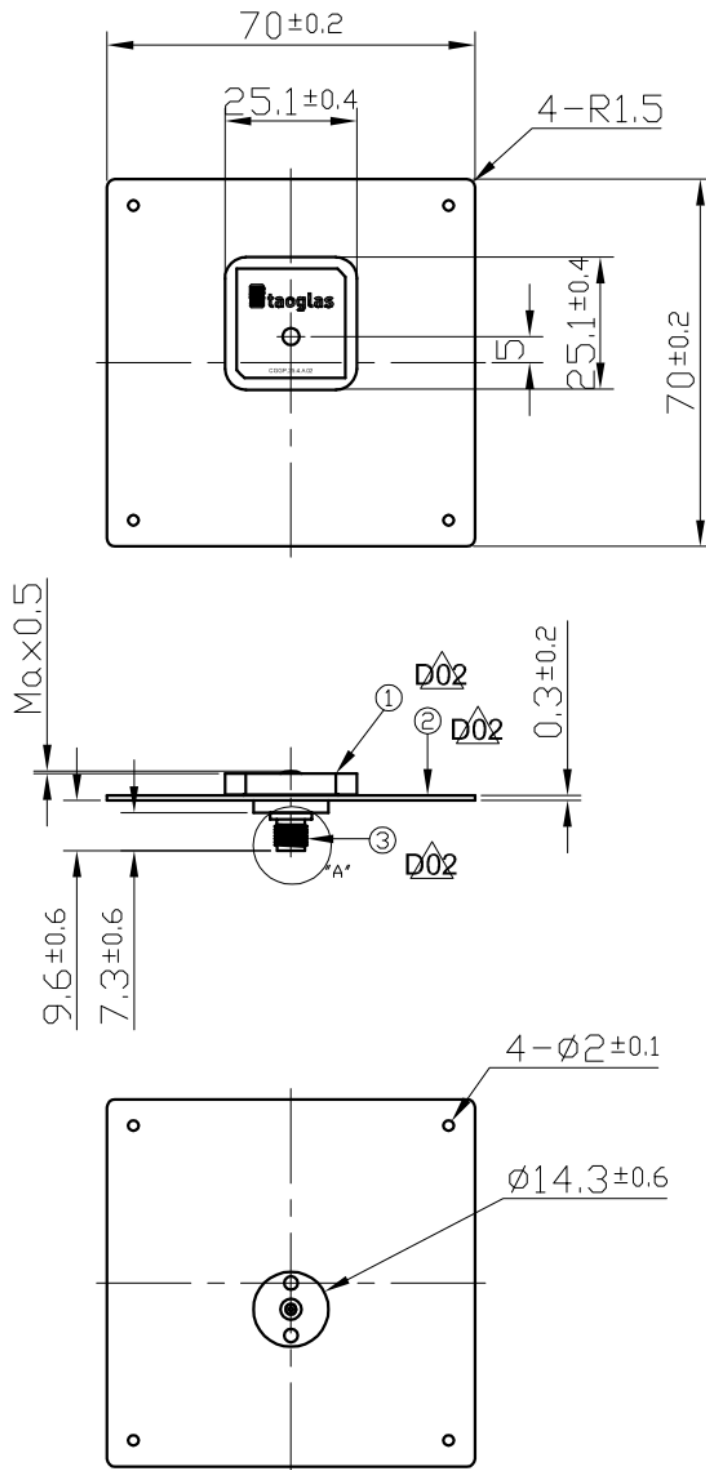


Red Line shows the adhesive without Liner – thickness 0.08~0.1mm

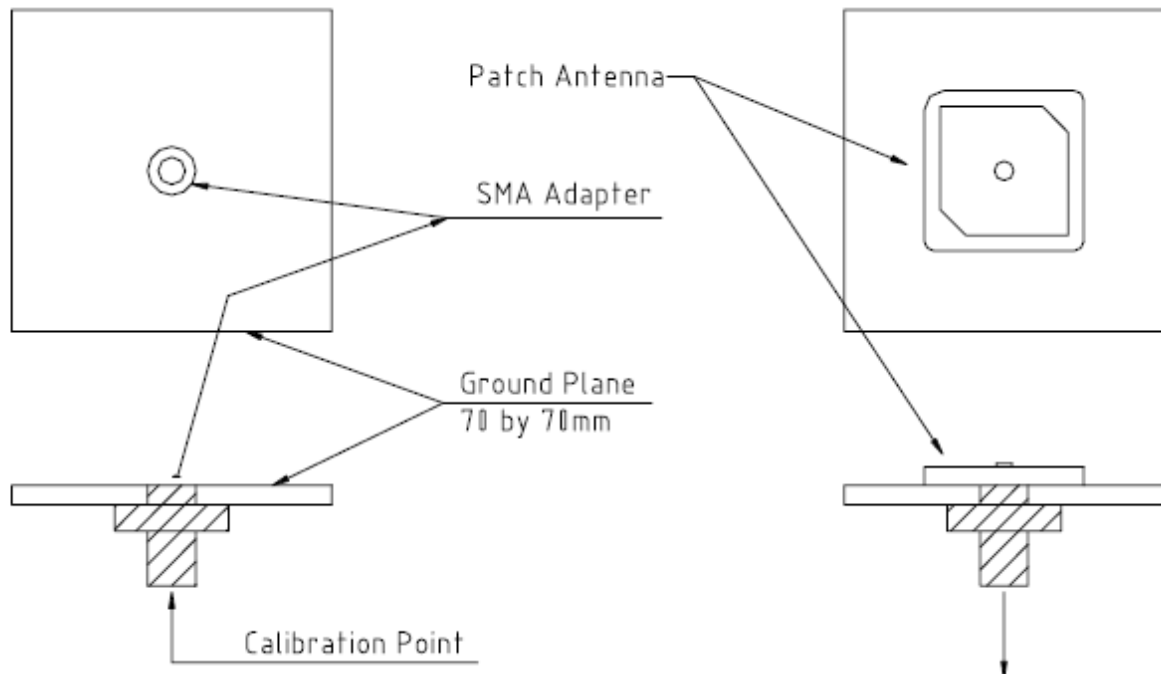
6. PCB Footprint Recommendation



7. Evaluation Board (CGGPD.25.A)

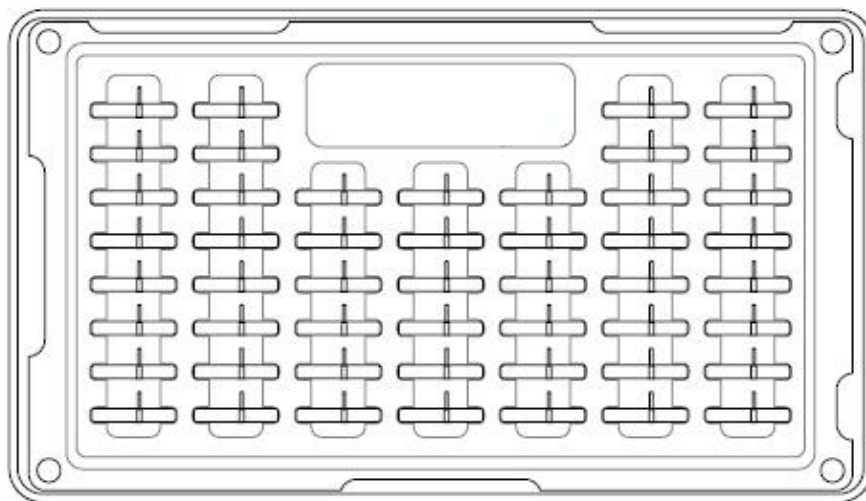


| | Name | Finish | QTY |
|---|---------------------------|-----------|-----|
| 1 | Patch(25x25x4mm) | Clear | 1 |
| 2 | Ground-Plane(70x70x0.3mm) | Ni Plated | 1 |
| 3 | SMA(F) ST | Gold | 1 |



8. Packaging

8.1. Inner Tray



200 pieces per tray

8.2. Carton

