

## 2JDK0201Ga-C104N

### GNSS Ceramic Thru-Hole Mount Development Kit

#### Key Features

GPS/GLONASS/QZSS/Galileo

- 1575-1606 MHz

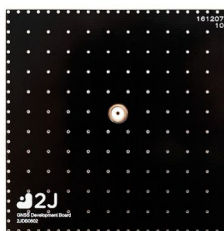
Set of 6 patches to try on devices

Thru-Hole Mount

High Gain

Ground Plane Independent

Patches Dimensions 25 x 25 x 4 mm



## 1. Antenna and electrical specifications

| Parameters               | GNSS Ceramic Thru-Hole Mount Antenna |           |
|--------------------------|--------------------------------------|-----------|
|                          | GPS/QZSS/Galileo                     | GLONASS   |
| <b>Standards</b>         |                                      |           |
| <b>Bands (MHz)</b>       | 1575                                 | 1602      |
| <b>Frequency (MHz)</b>   |                                      |           |
| 2JCP2540101Ga (2J40)     | 1575.42                              | 1598-1606 |
| 2JCP2540102Ga (2J41)     | 1580.42                              | 1603-1611 |
| 2JCP2540103Ga (2J42)     | 1585.42                              | 1608-1616 |
| 2JCP2540104Ga (2J43)     | 1590.42                              | 1613-1621 |
| 2JCP2540105Ga (2J44)     | 1595.42                              | 1618-1626 |
| 2JCP2540106Ga (2J45)     | 1600.42                              | 1623-1631 |
| <b>Return Loss (dB)</b>  | ~-21.8                               | ~-15.7    |
| <b>VSWR</b>              | ~1.1:1                               | ~1.4:1    |
| <b>Efficiency (%)</b>    | ~65                                  | ~68       |
| <b>Peak Gain (dBiC)</b>  | ~3.6                                 | ~3.9      |
| <b>Average Gain (dB)</b> | ~-1.8                                | ~-1.6     |
| <b>Impedance (Ohms)</b>  | 50                                   |           |
| <b>Radiation Pattern</b> | Hemispherical                        |           |

### Antenna Measurement Conditions:

Free Space

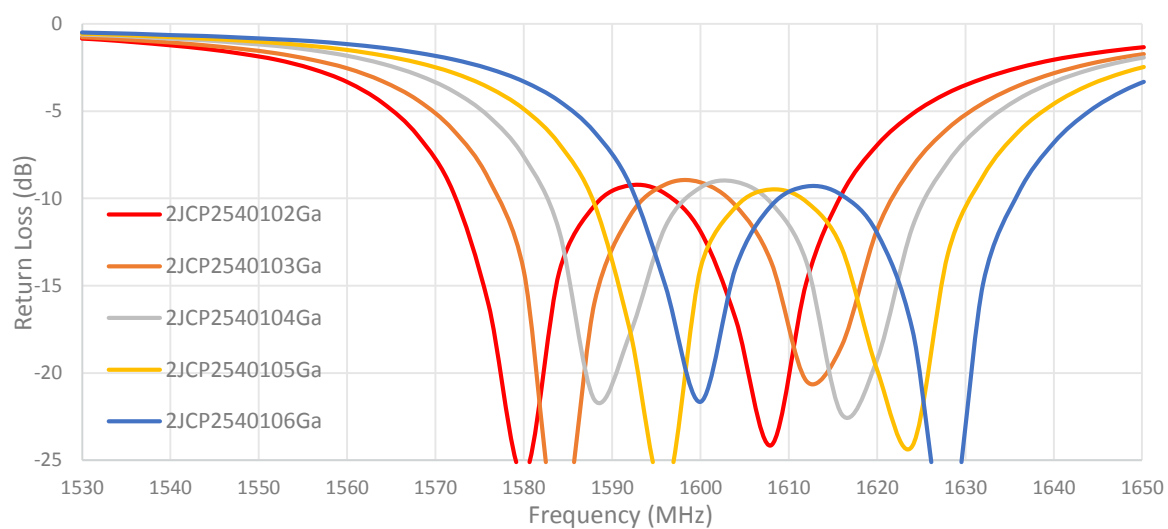
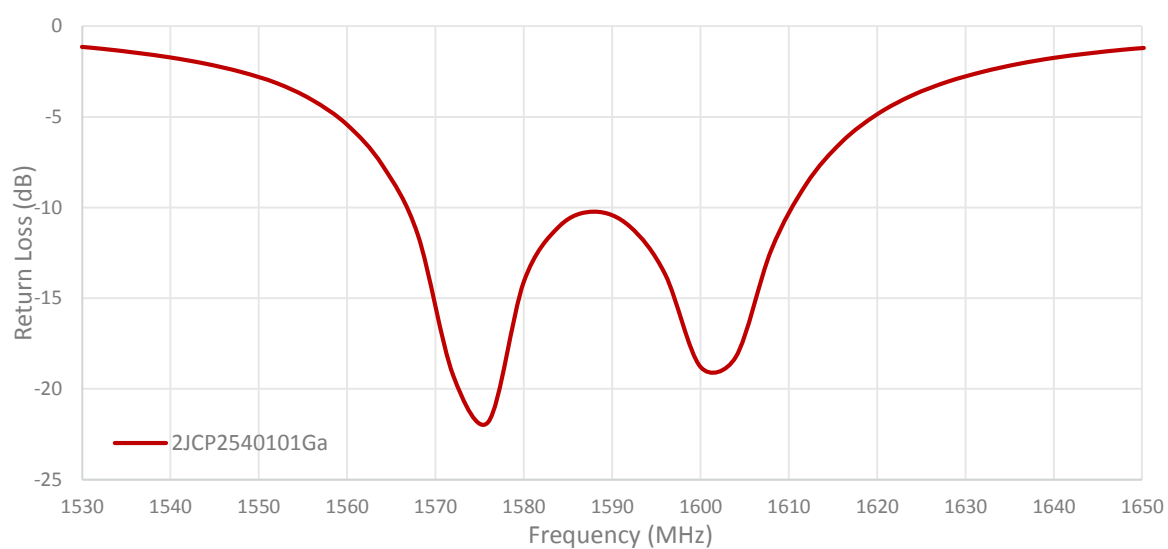
Mounted on Ground Plane of 70 x 70 mm

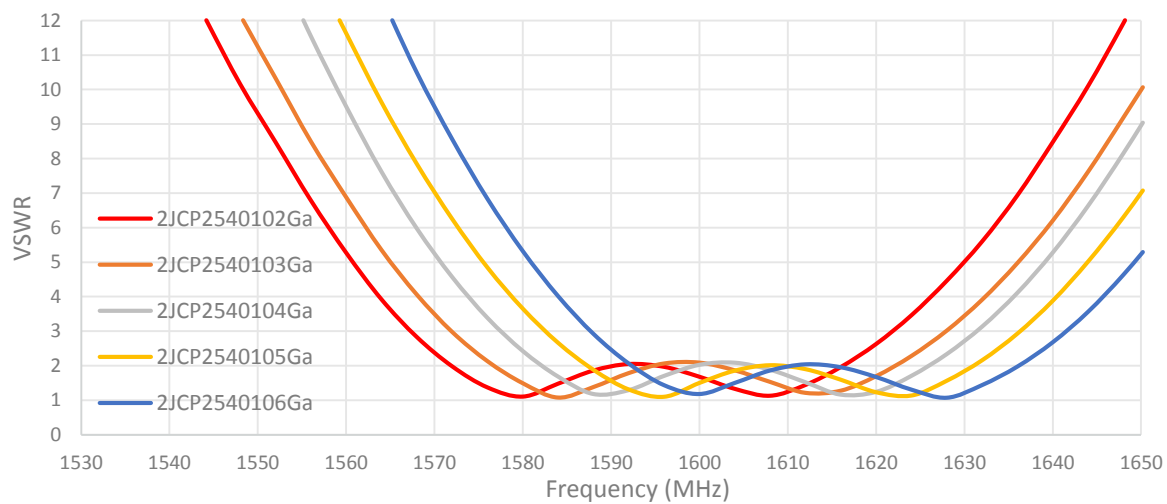
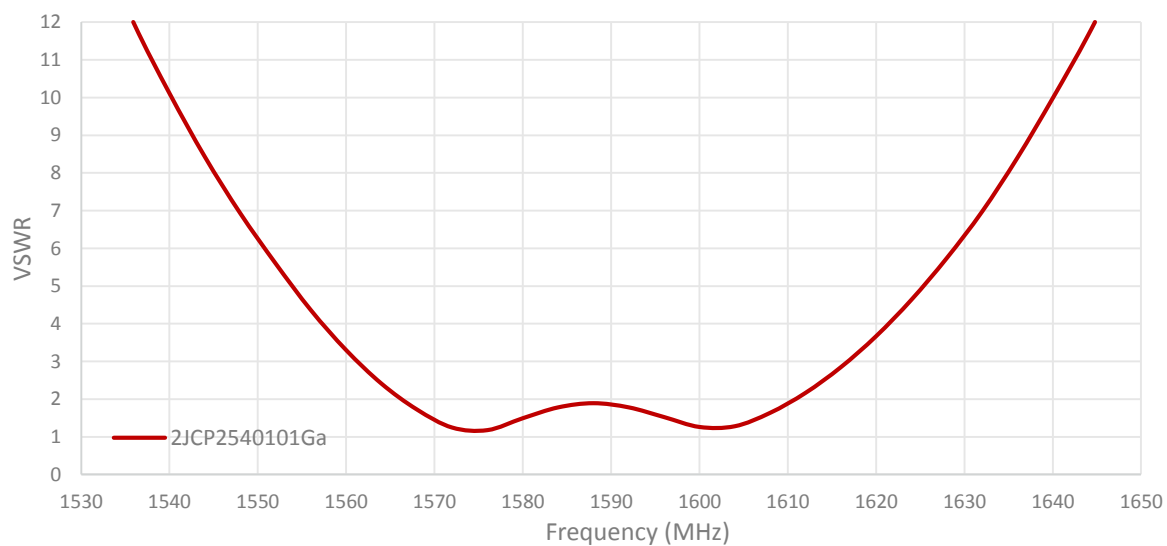
Measured in Certified CTIA 3D Anechoic Chamber

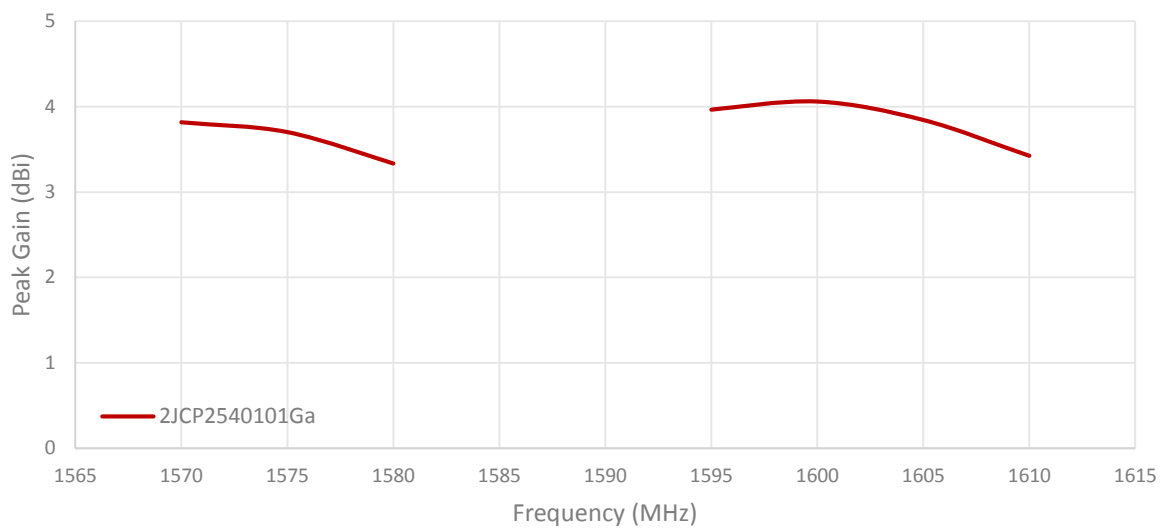
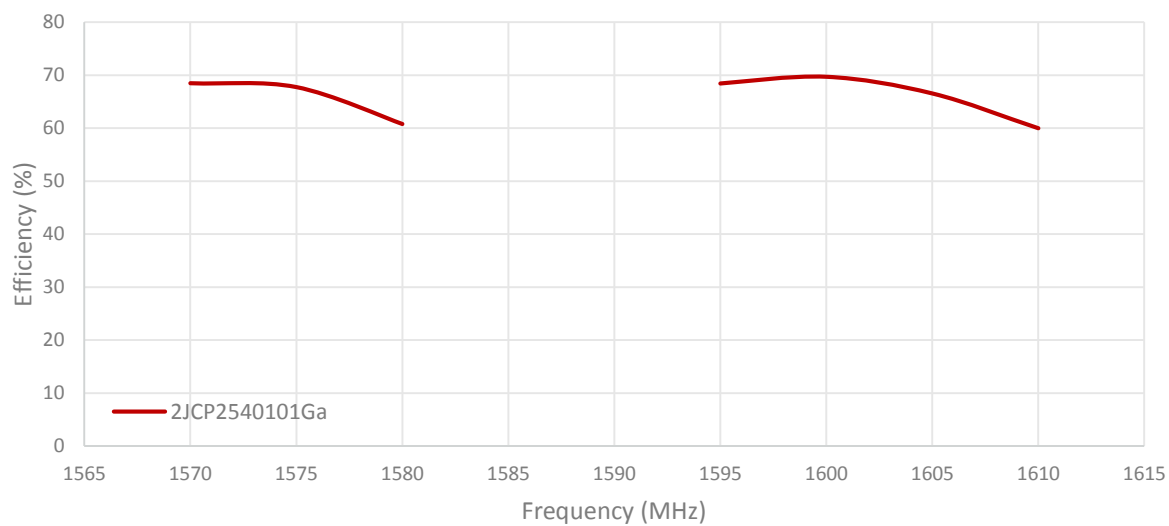
## 2. Mechanical and environmental specifications

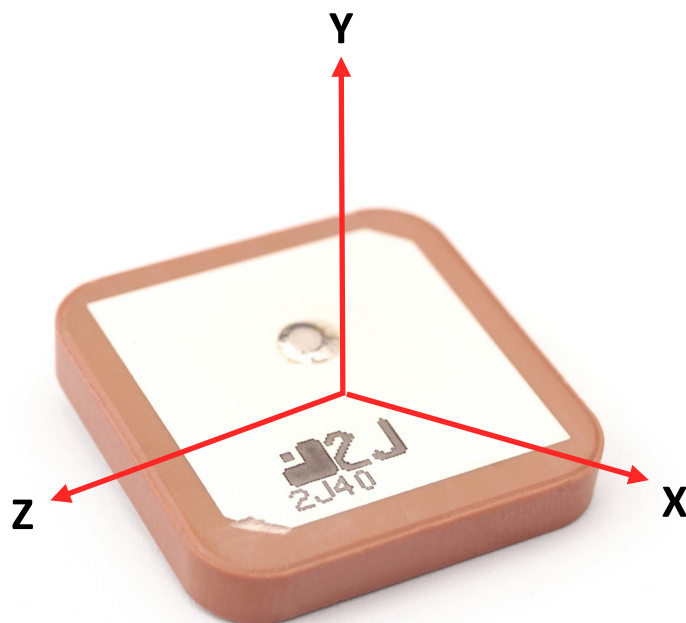
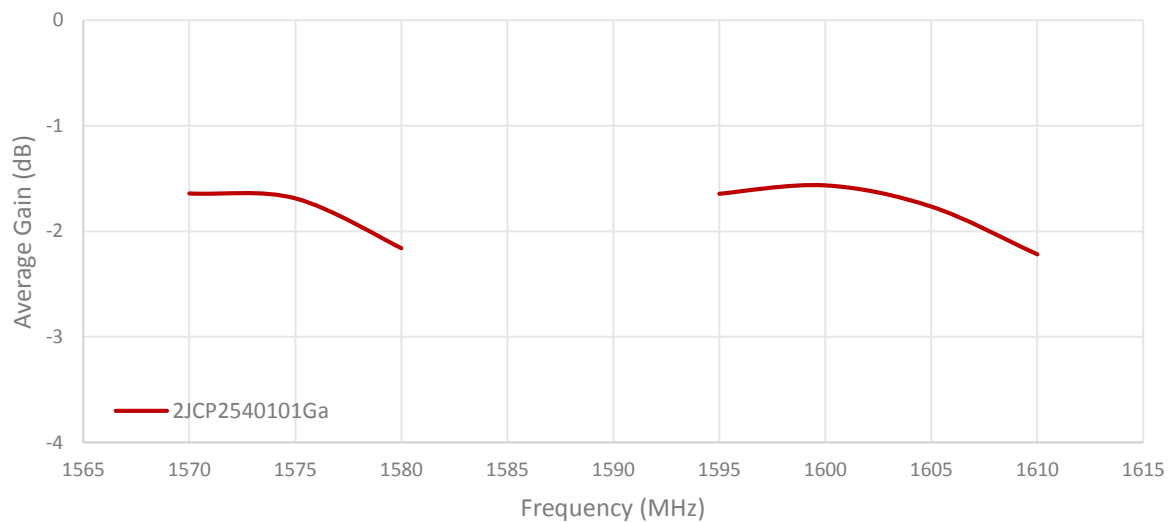
| Specifications                   | 2JCP2540101Ga   |
|----------------------------------|-----------------|
| <b>Mounting Type</b>             | Thru-Hole Mount |
| <b>Adhesive</b>                  | Nitto 5000NS    |
| <b>Dimensions (mm)</b>           | 25 x 25 x 4     |
| <b>Operating Temperature (C)</b> | -40 to +85      |
| <b>Storage Temperature (C)</b>   | -40 to +85      |
| <b>Substance Compliance</b>      | RoHS            |

### 3. Antenna parameters

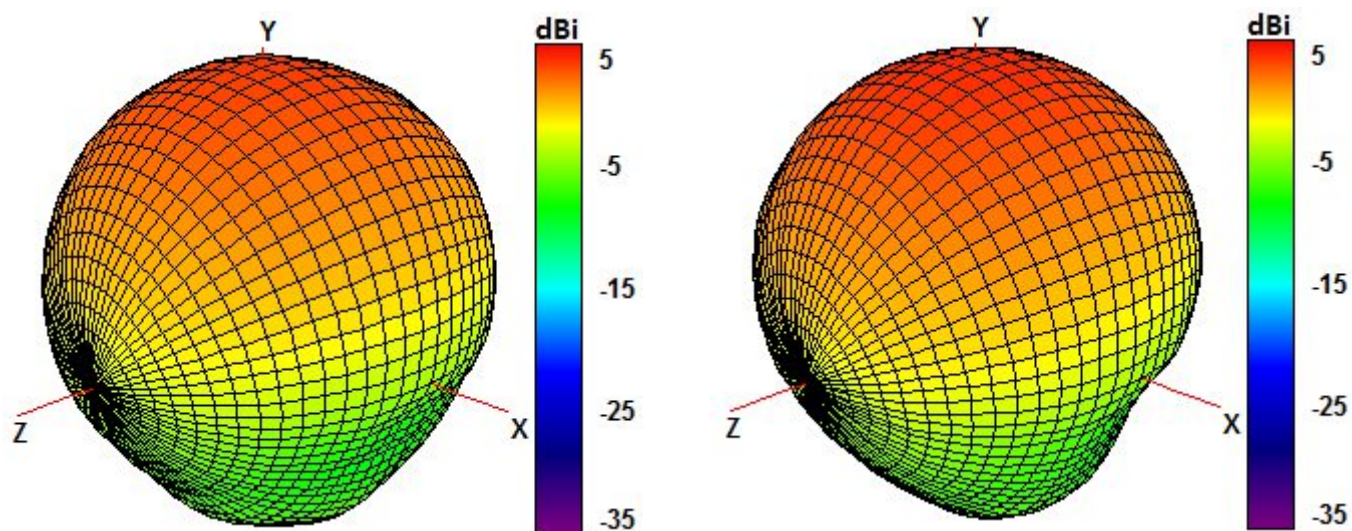






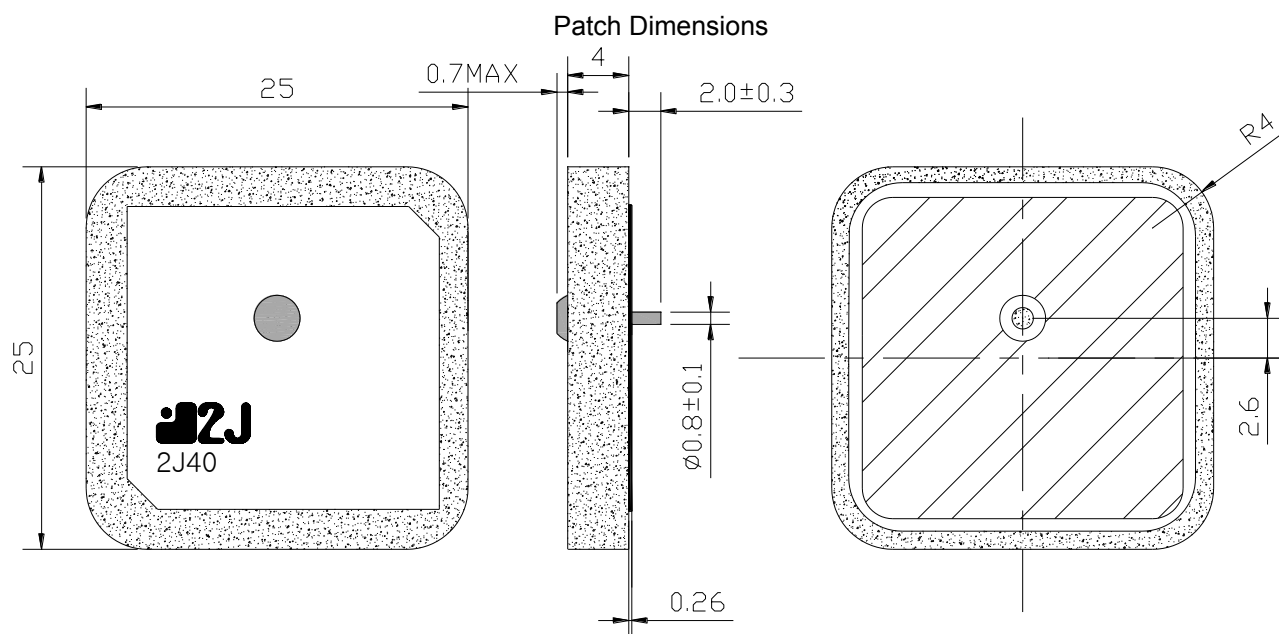


Radiation pattern reference

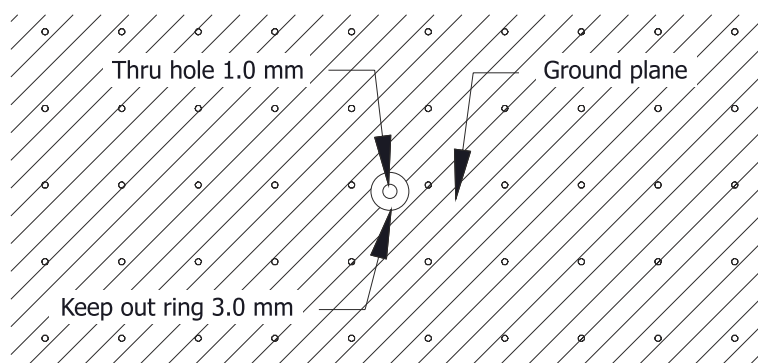


1575 and 1602 MHz Radiation pattern

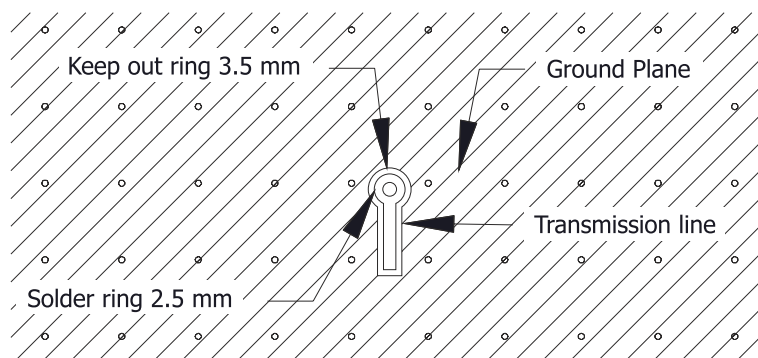
## 4. Antenna drawings



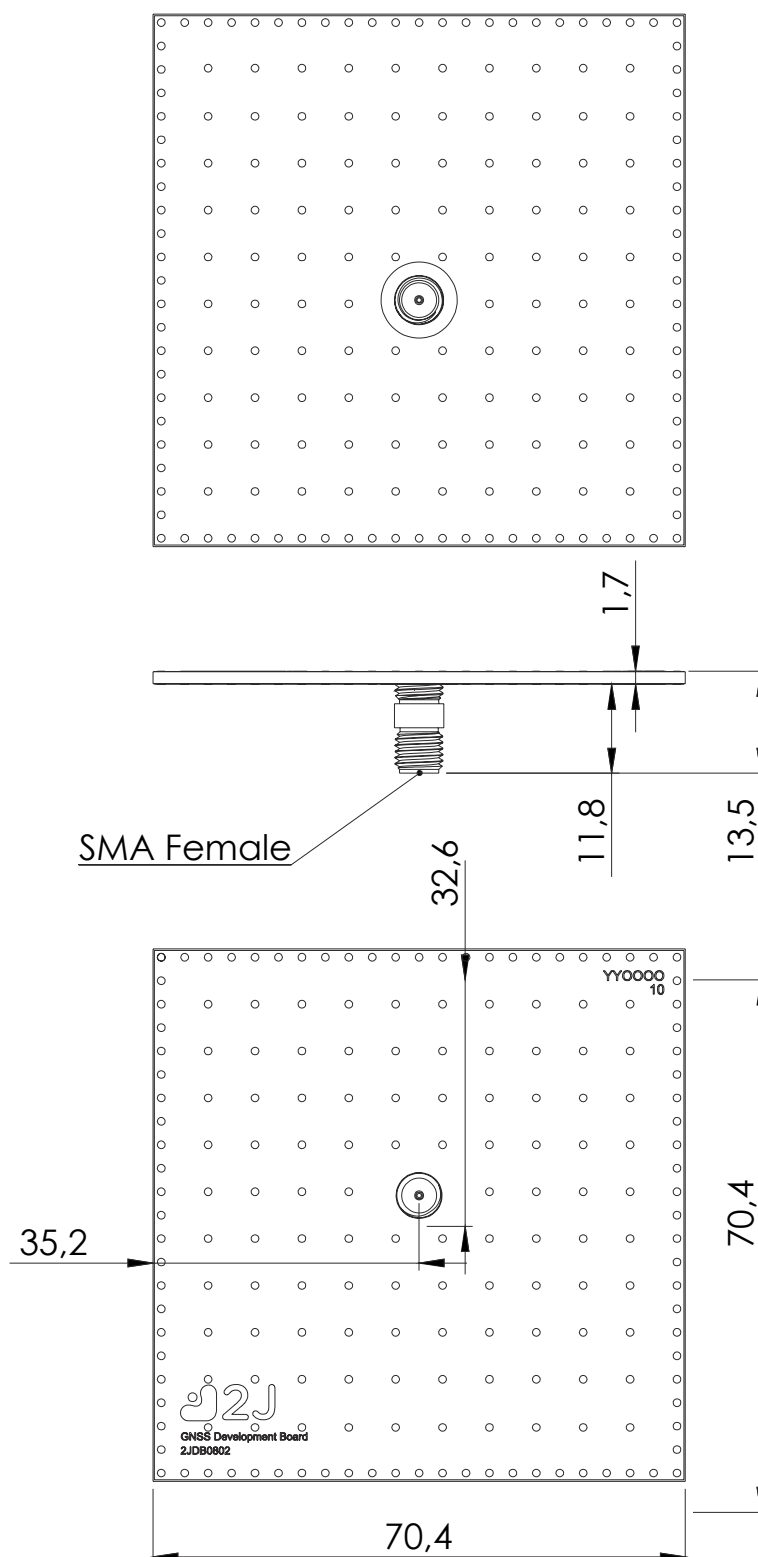
Layout for top layer



Layout for bottom layer



## 2JDB0802 Development board



## 5. Antenna Images

