antenna conceptor

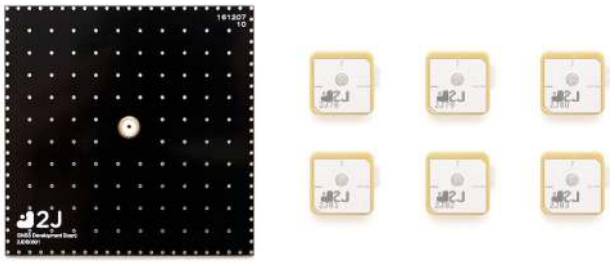
Product Datasheet

2JDK0101Ga-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 18 x 18 x 4 mm



1. Antenna and electrical specifications

Parameters	GNSS Ceramic Thru-Hole Mount Antenna	
Standards	GPS/QZSS/Galileo	GLONASS
Bands (MHz)	1575	1602
Frequency (MHz) 2JCP1840101Ga (2J78)	1575.42	1598-1606
2JCP1840102Ga (2J79)	1580.42	1603-1611
2JCP1840103Ga (2J80)	1585.42	1608-1616
2JCP1840104Ga (2J81)	1590.42	1613-1621
2JCP1840105Ga (2J82)	1595.42	1618-1626
2JCP1840106Ga (2J83)	1600.42	1623-1631
Return Loss (dB)	~-26.0	~-18.8
VSWR	~1.1:1	~1.3:1
Efficiency (%)	~73.9	~73.7
Peak Gain (dBiC)	~4.1	~4.2
Average Gain (dB)	~-1.3	~-1.3
Impendance (Ohms)	50	
Radiation Pattern	Hemispherical	

Antenna Measurement Conditions:

Free Space

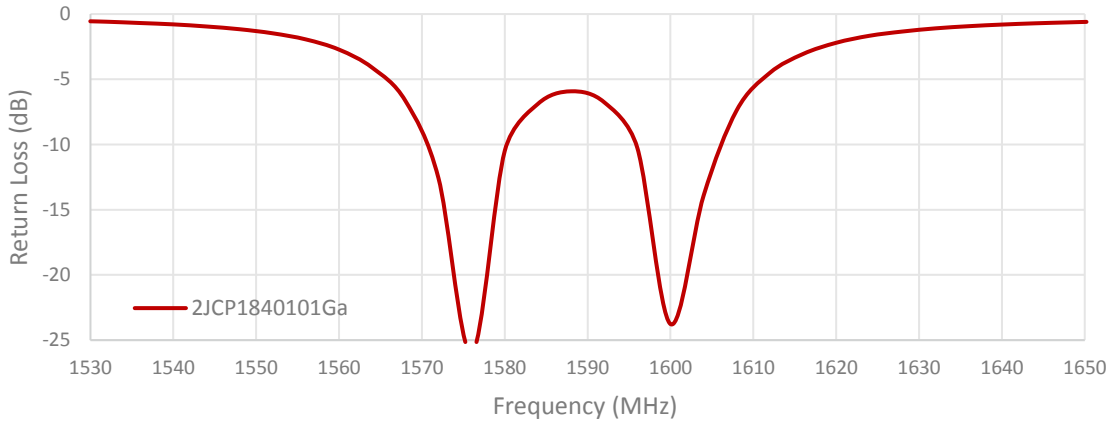
Mounted on Ground Plane of 70 x 70 mm

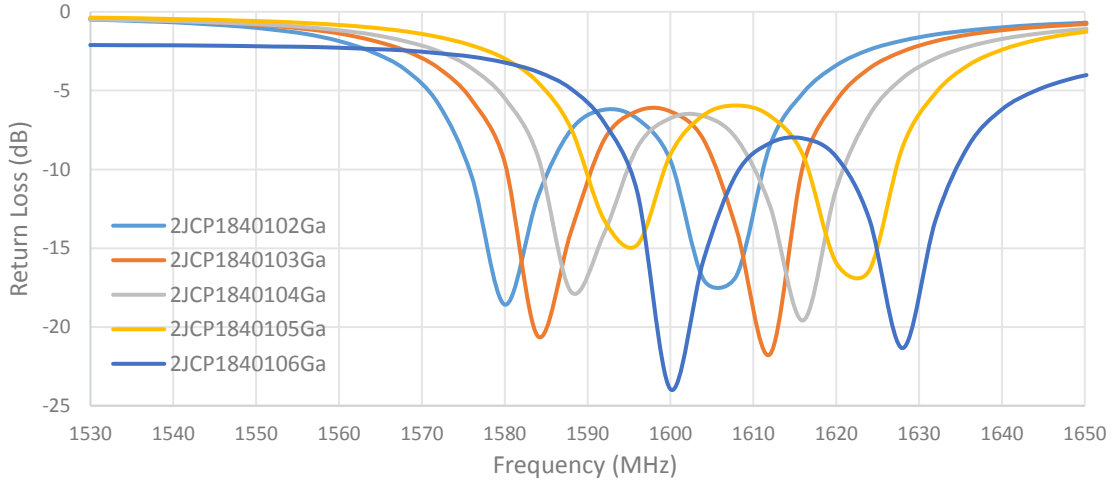
Measured in Certified CTIA 3D Anechoic Chamber

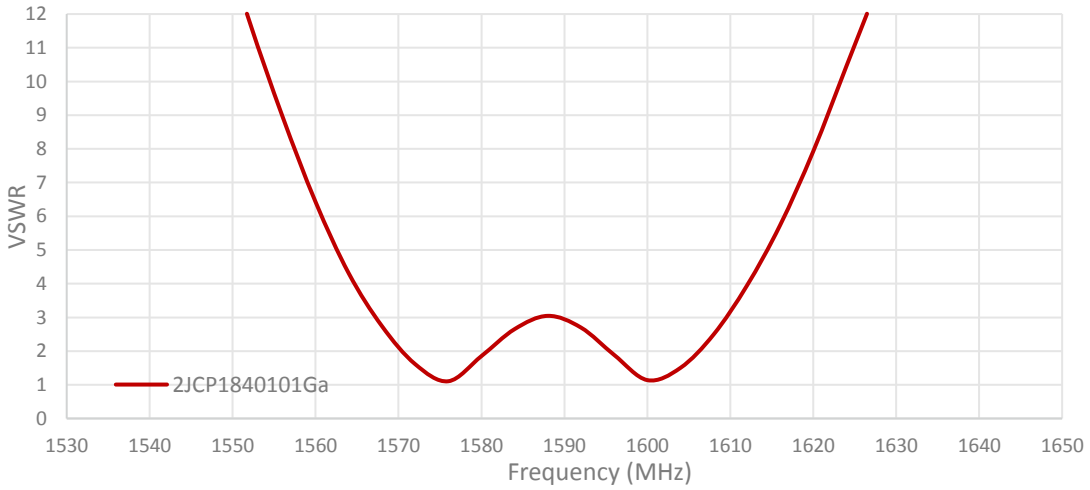
2. Mechanical and environmental specifications

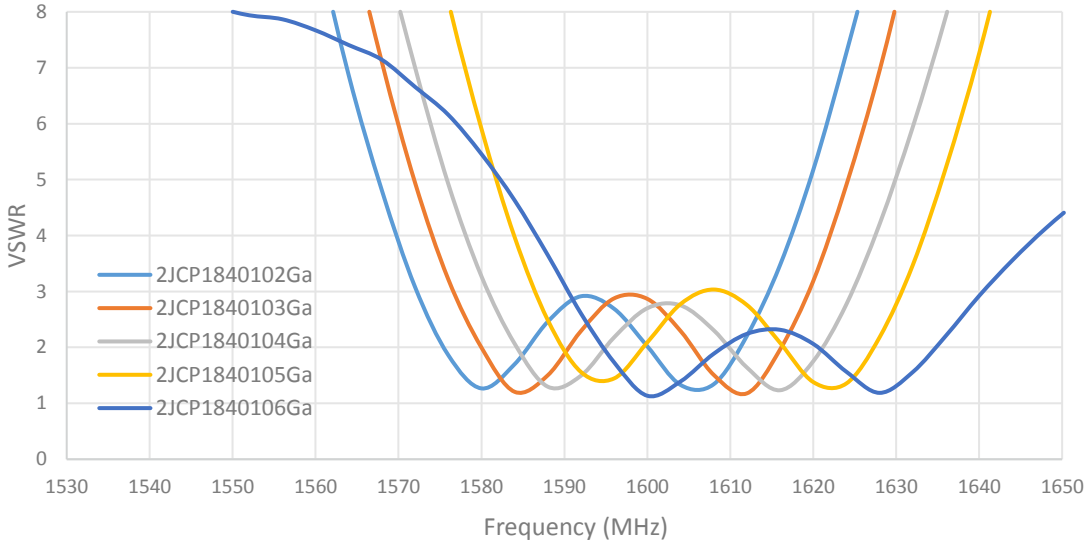
Specifications	2JCP1840101Ga
Mounting Type	Thru-Hole Mount
Adhesive	Nitto 5000NS
Dimensions (mm)	18 x 18 x 4
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS

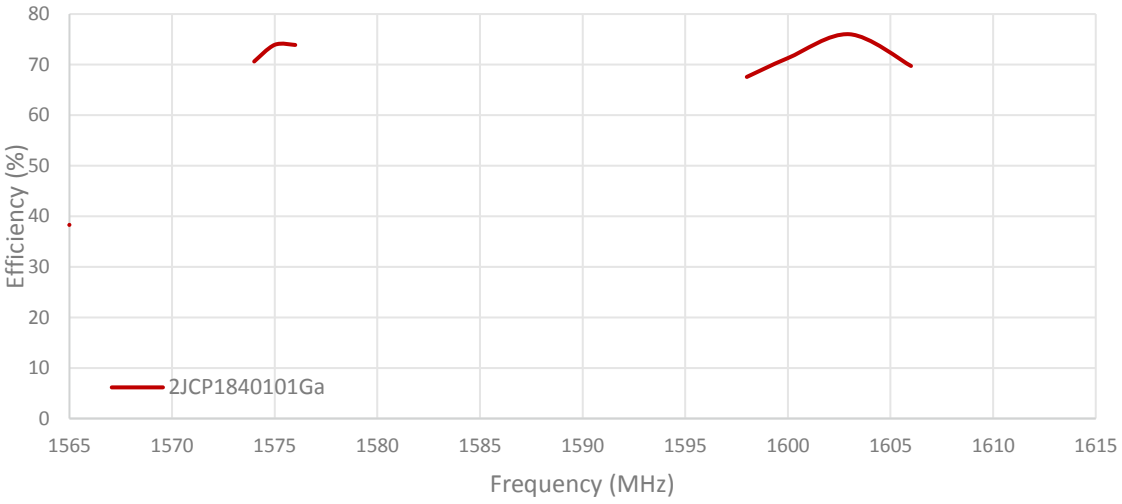
3. Antenna parameters

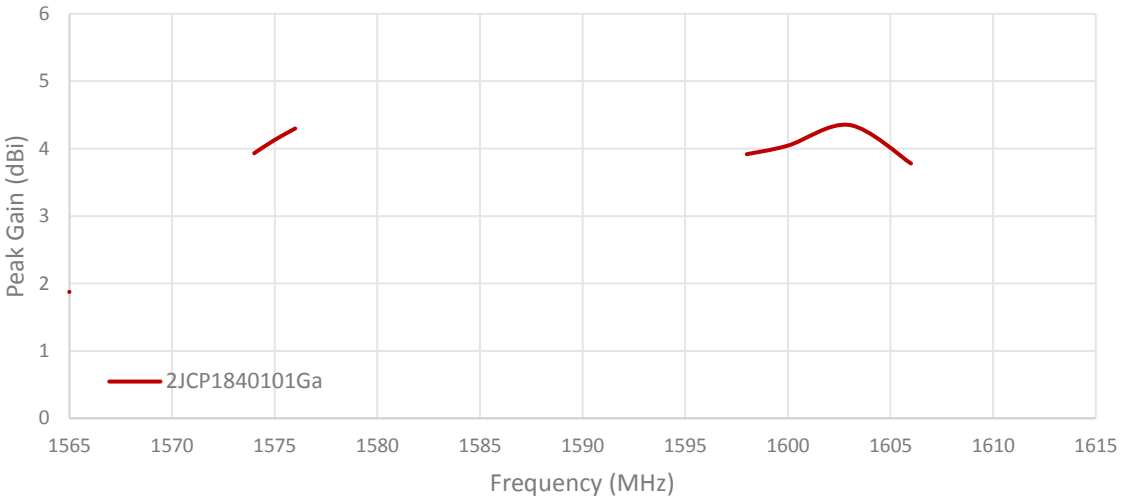


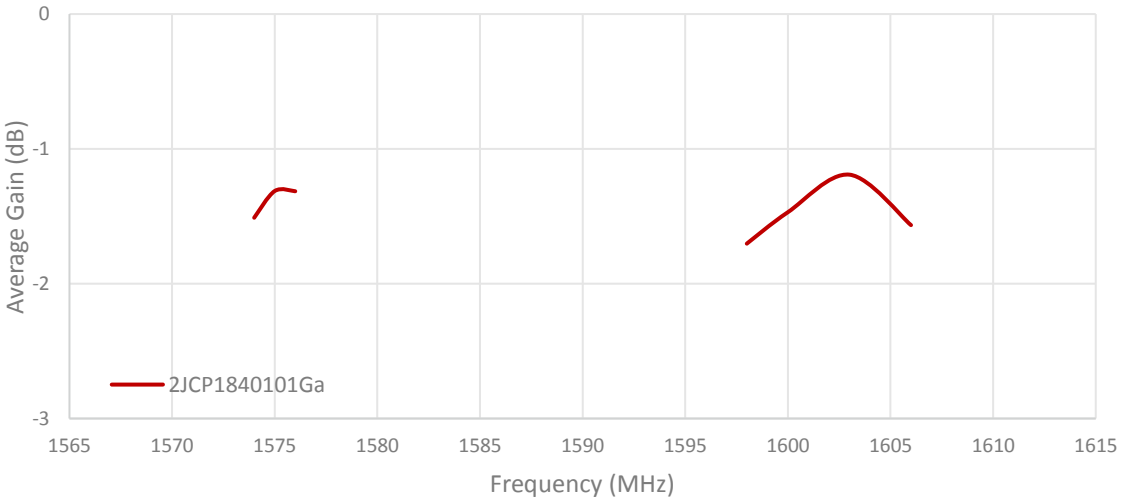


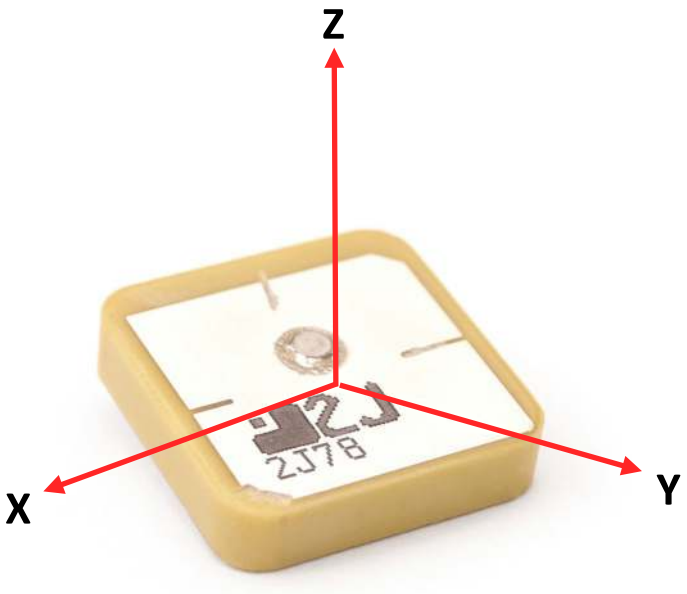

VSWR
Frequency (MHz)
2JCP1840101Ga


VSWR
Frequency (MHz)
2JCP1840102Ga
2JCP1840103Ga
2JCP1840104Ga
2JCP1840105Ga
2JCP1840106Ga

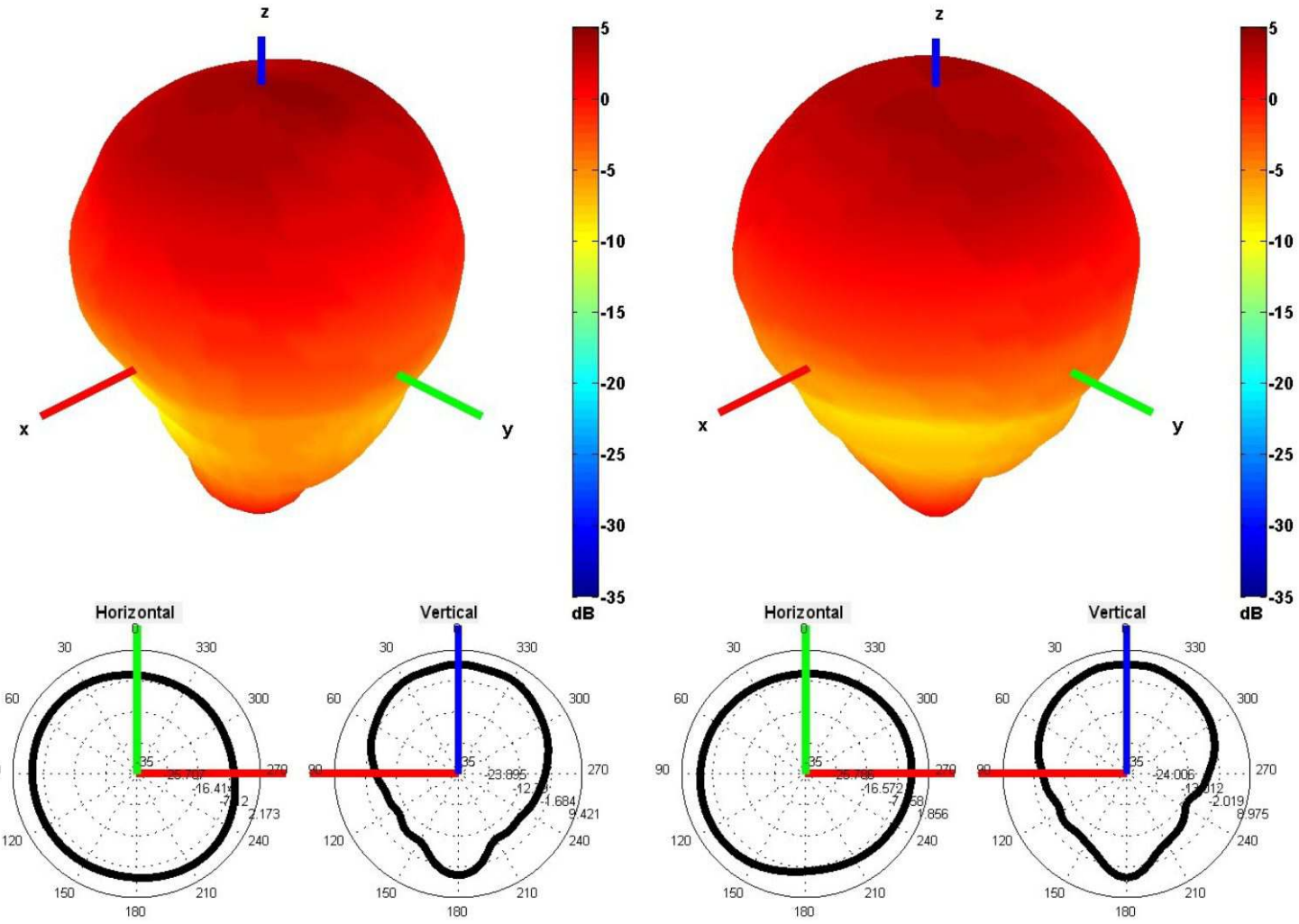

80
70
60
50
40
30
20
10
0
Efficiency (%)
2JCP1840101Ga
1565
1570
1575
1580
1585
1590
1595
1600
1605
1610
1615
Frequency (MHz)


6
5
4
3
2
1
0
Peak Gain (dBi)
2JCP1840101Ga
1565
1570
1575
1580
1585
1590
1595
1600
1605
1610
1615
Frequency (MHz)





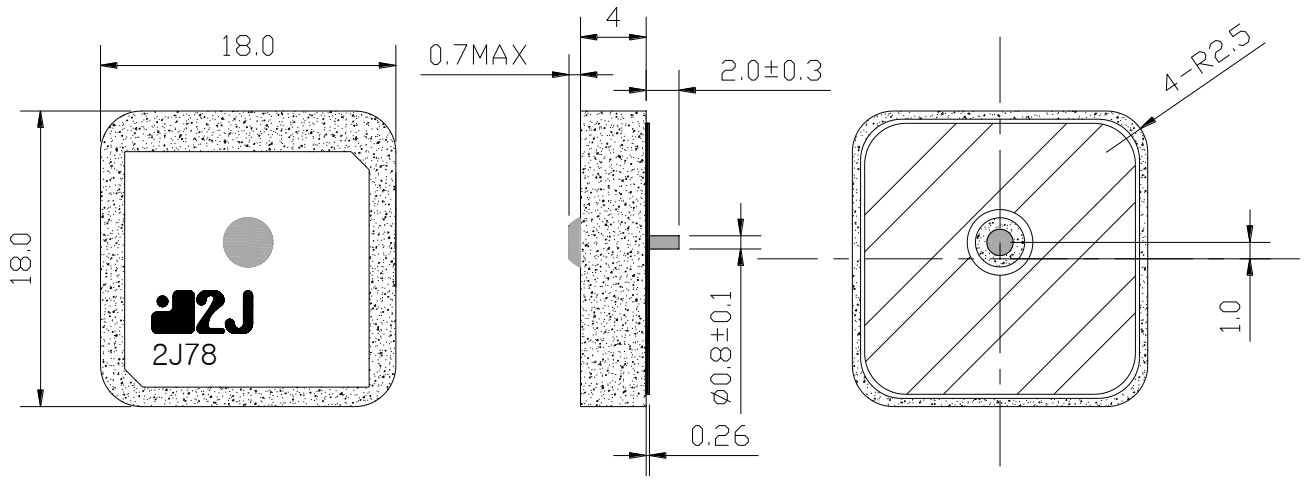
Radiation pattern reference



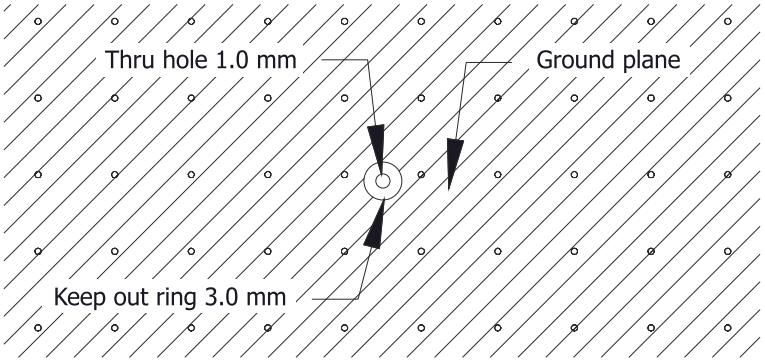
1575 AND 1602 MHz RADIATION PATTERN

4. Antenna drawings

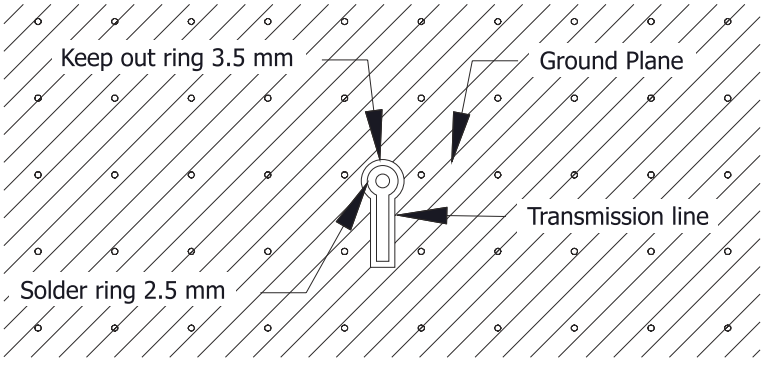
Patch Dimensions



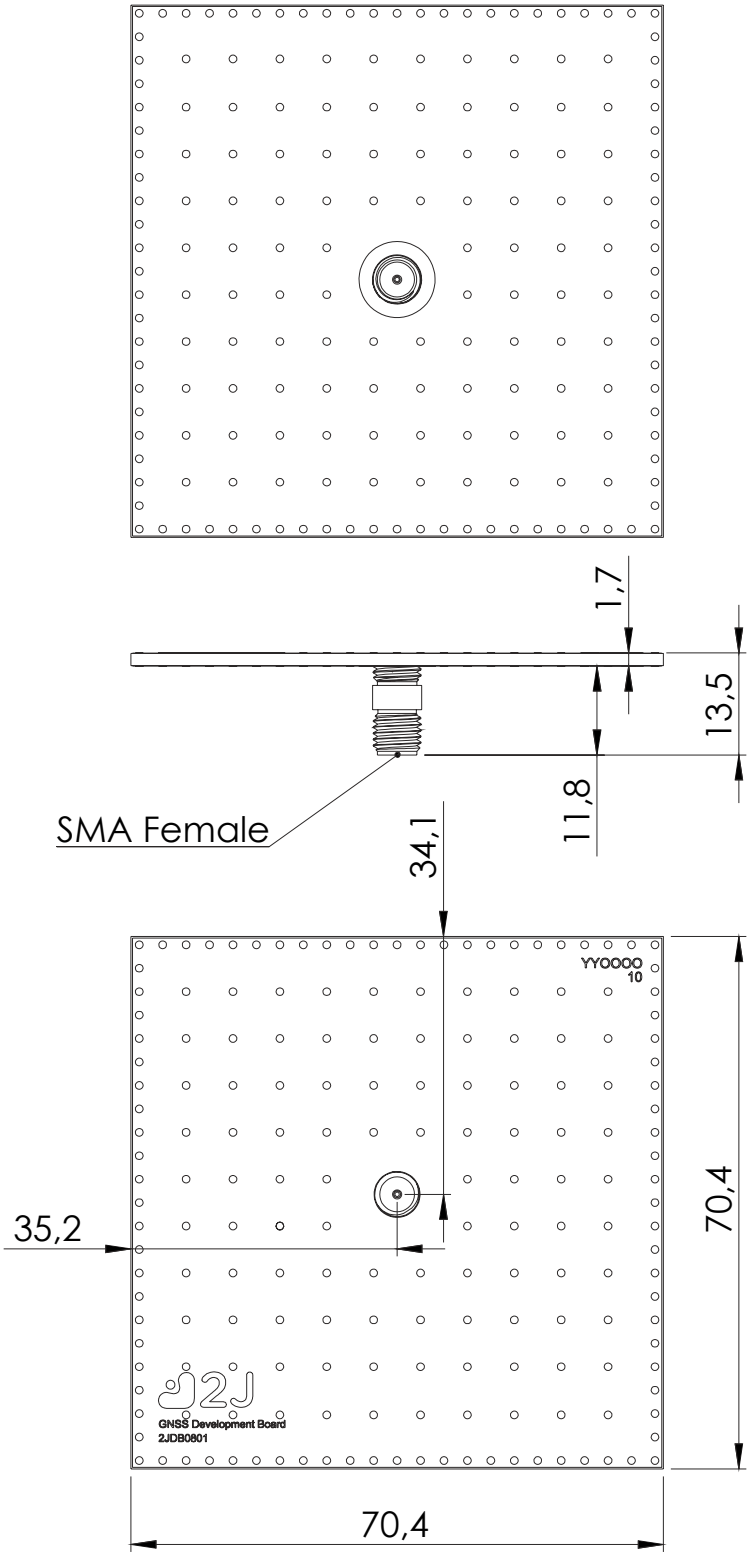
Layout for top layer



Layout for bottom layer



2JDB0801 Development board



5. Antenna Images