antenna conceptor

Product Datasheet

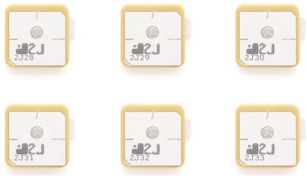
2JDK0101a-C104N

GNSS Ceramic Thru-Hole Mount Development Kit

Key Features

GPS/QZSS/Galileo
- 1575 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





antenna conceptor

1. Antenna and electrical specifications

Parameters		GNSS Ceramic Thru-Hole Mount Antenna
Standards		GPS/QZSS/Galileo
Bands (MHz)		1575
Frequency (MHz)	2JCP1840101a (2J28)	1575.42
	2JCP1840102a (2J29)	1580.42
	2JCP1840103a (2J30)	1585.42
	2JCP1840104a (2J31)	1590.42
	2JCP1840105a (2J32)	1595.42
	2JCP1840106a (2J33)	1600.42
Return Loss (dB)		~-26.0
VSWR		~1.0:1
Efficiency (%)		~65
Peak Gain (dBiC)		~3.6
Average Gain (dB)		~-1.8
Impendance (Ohms)		50
Radiation Pattern		Hemispherical
Axial Ratio (dB)		3 max
Polarization		RHCP

Antenna Measurement Conditions:

Free Space

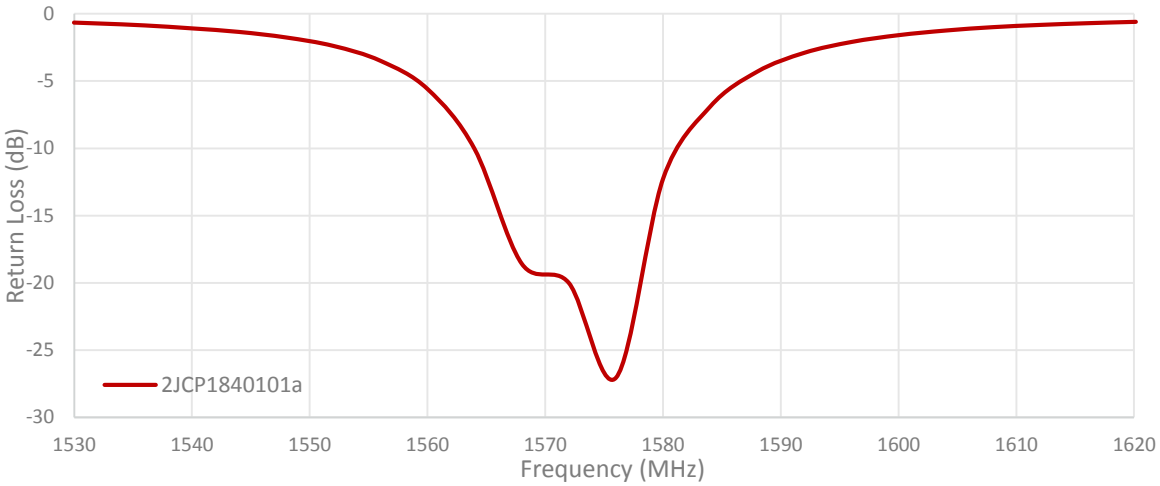
Mounted on Ground Plane of 70 x 70 mm

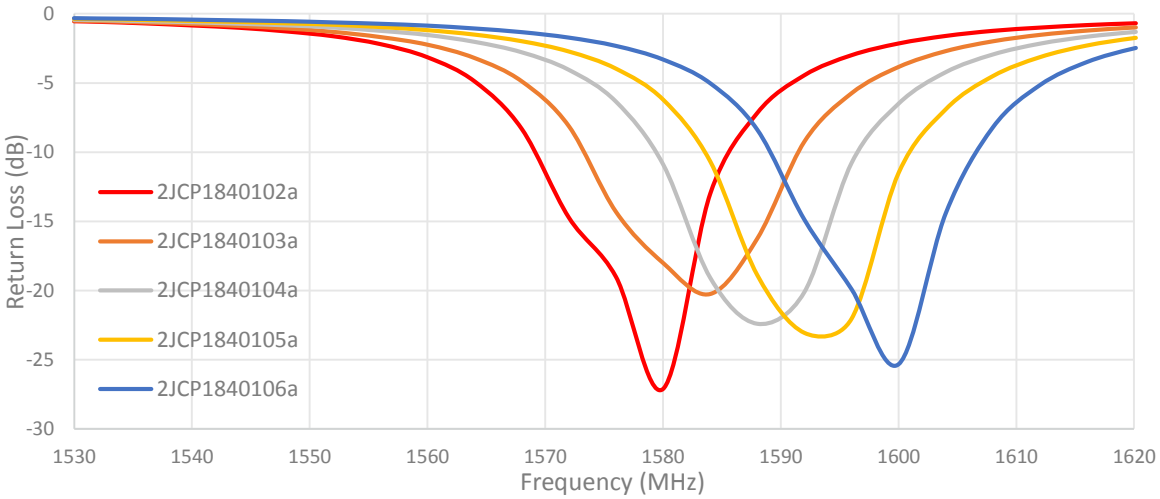
Measured in Certified CTIA 3D Anechoic Chamber

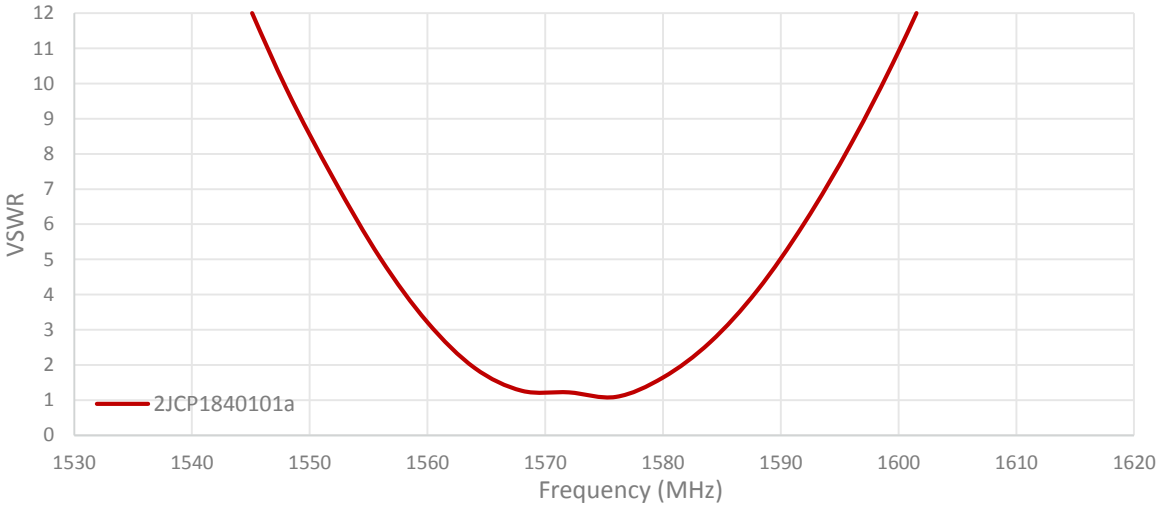
2. Mechanical and environmental specifications

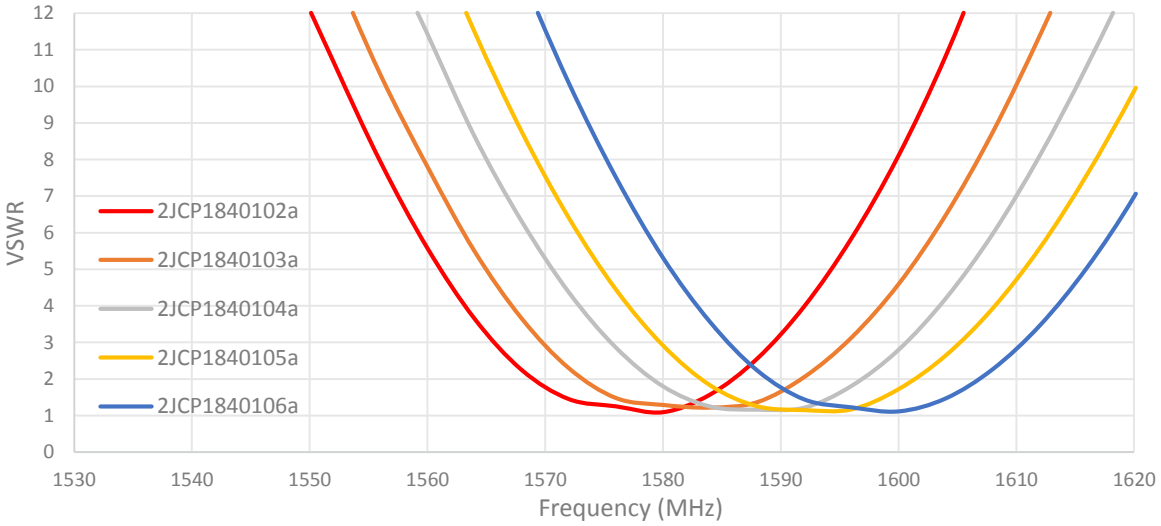
Specifications	2JCP1840101a
Mounting Type	Thru-Hole Mount
Adhesive	Nitto 5000NS
Dimensions (mm)	18 x 18 x 4
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS

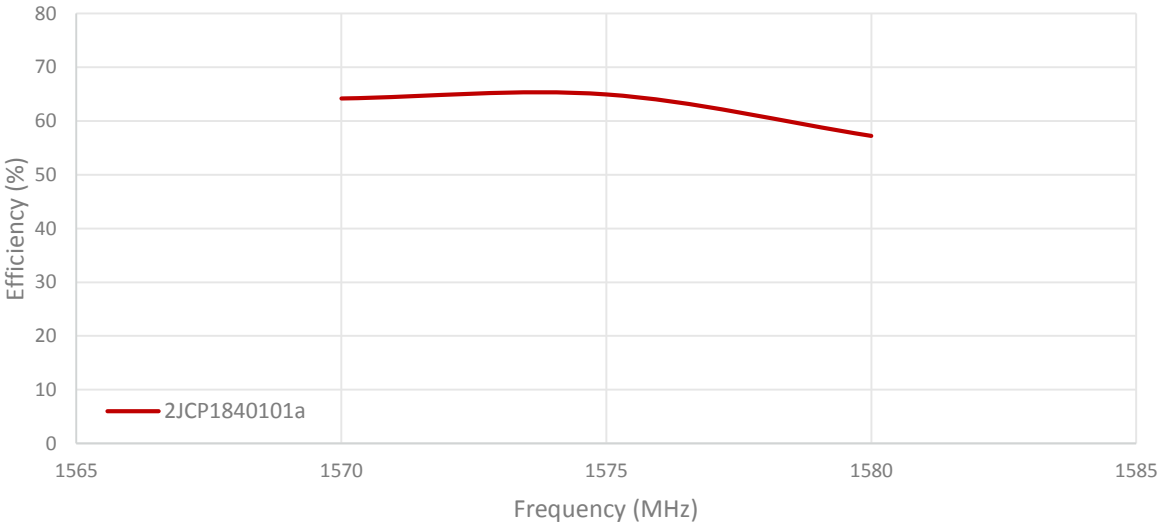
3. Antenna parameters

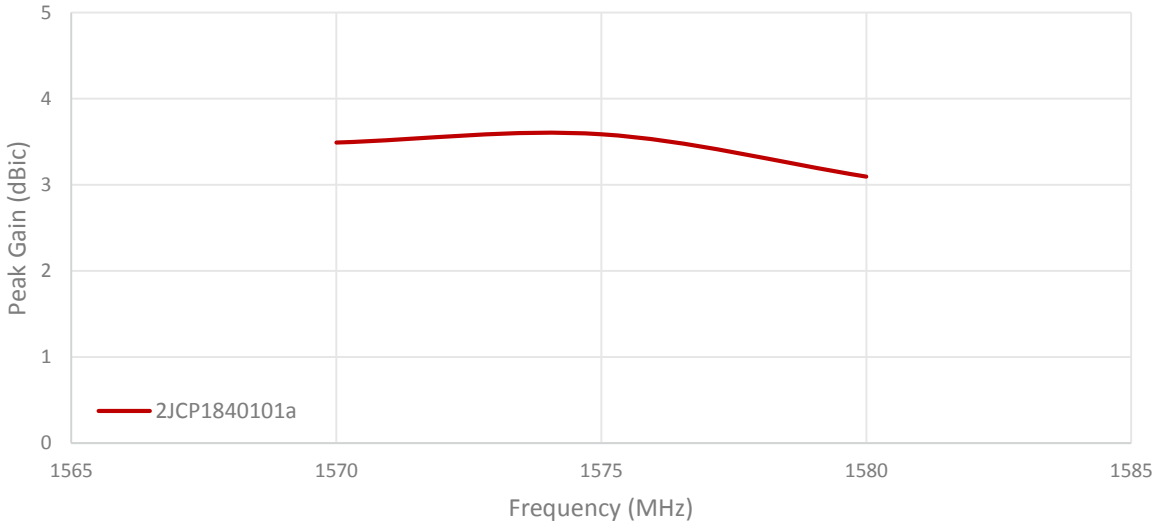


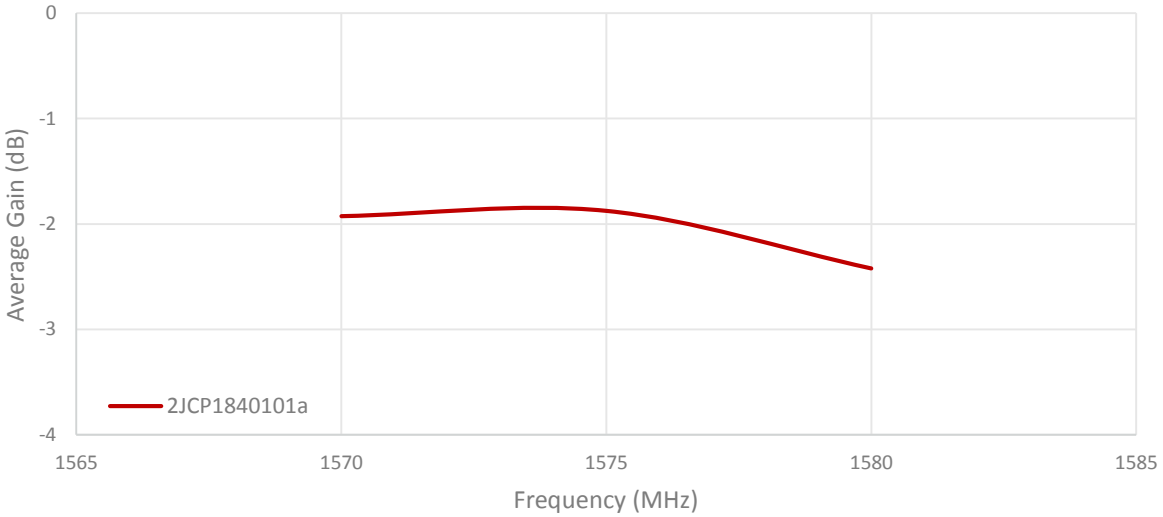


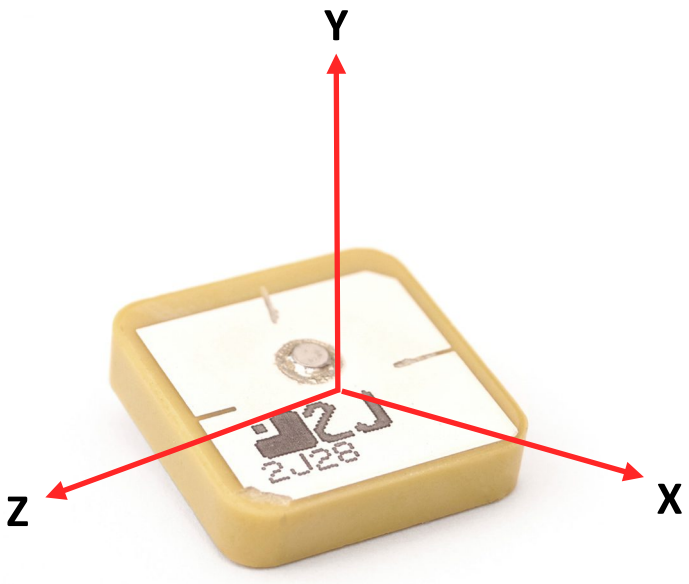

VSWR
Frequency (MHz)
2JCP1840101a
0
1
2
3
4
5
6
7
8
9
10
11
12
1530
1540
1550
1560
1570
1580
1590
1600
1610
1620


VSWR
Frequency (MHz)
2JCP1840102a
2JCP1840103a
2JCP1840104a
2JCP1840105a
2JCP1840106a
0
1
2
3
4
5
6
7
8
9
10
11
12
1530
1540
1550
1560
1570
1580
1590
1600
1610
1620

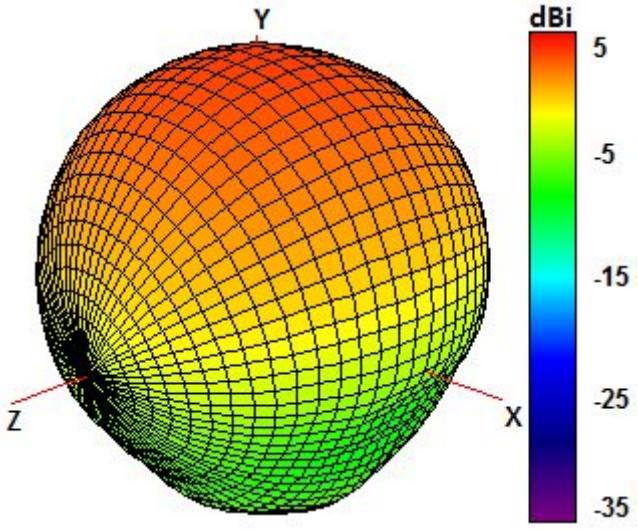

80
70
60
50
40
30
20
10
0
Efficiency (%)
2JCP1840101a
1565
1570
1575
1580
1585
Frequency (MHz)


5
4
3
2
1
0
Peak Gain (dBic)
2JCP1840101a
1565
1570
1575
1580
1585
Frequency (MHz)





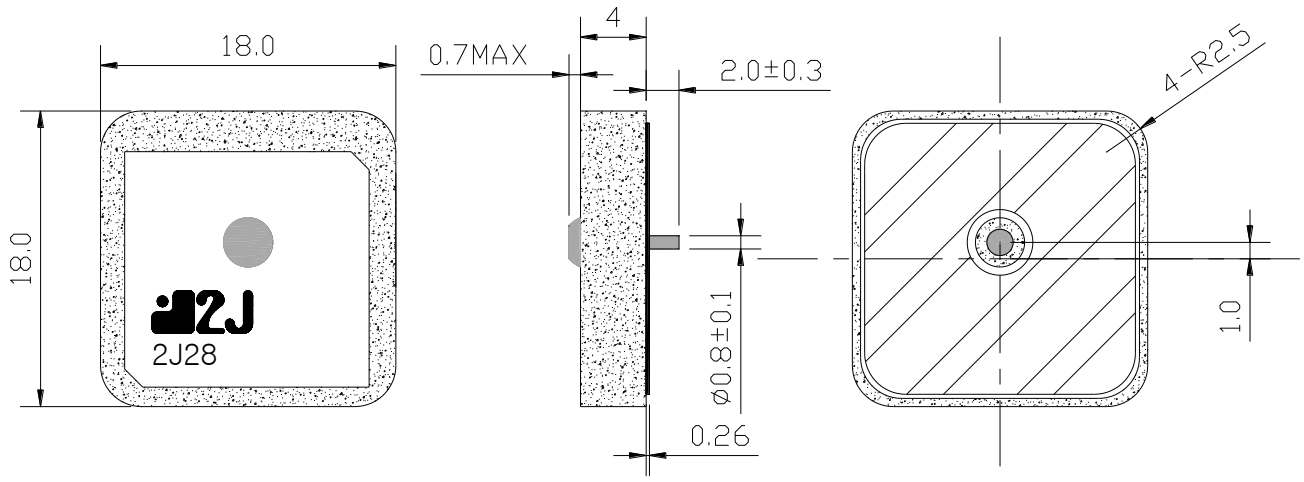
Radiation pattern reference



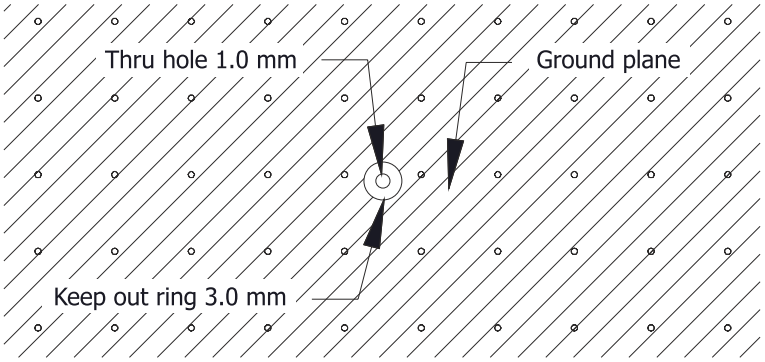
1575 MHz Radiation pattern

4. Antenna drawings

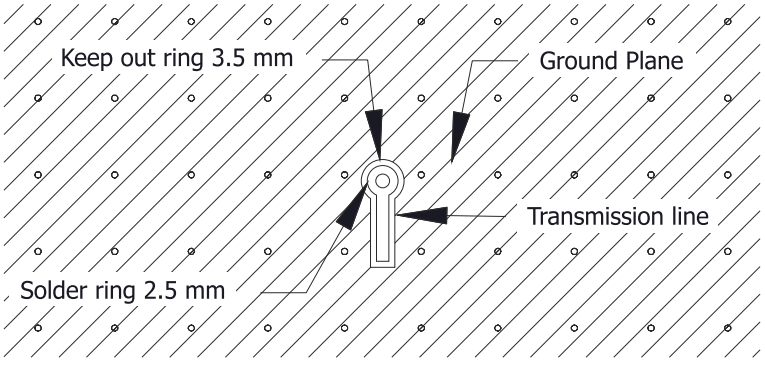
Patch Dimensions



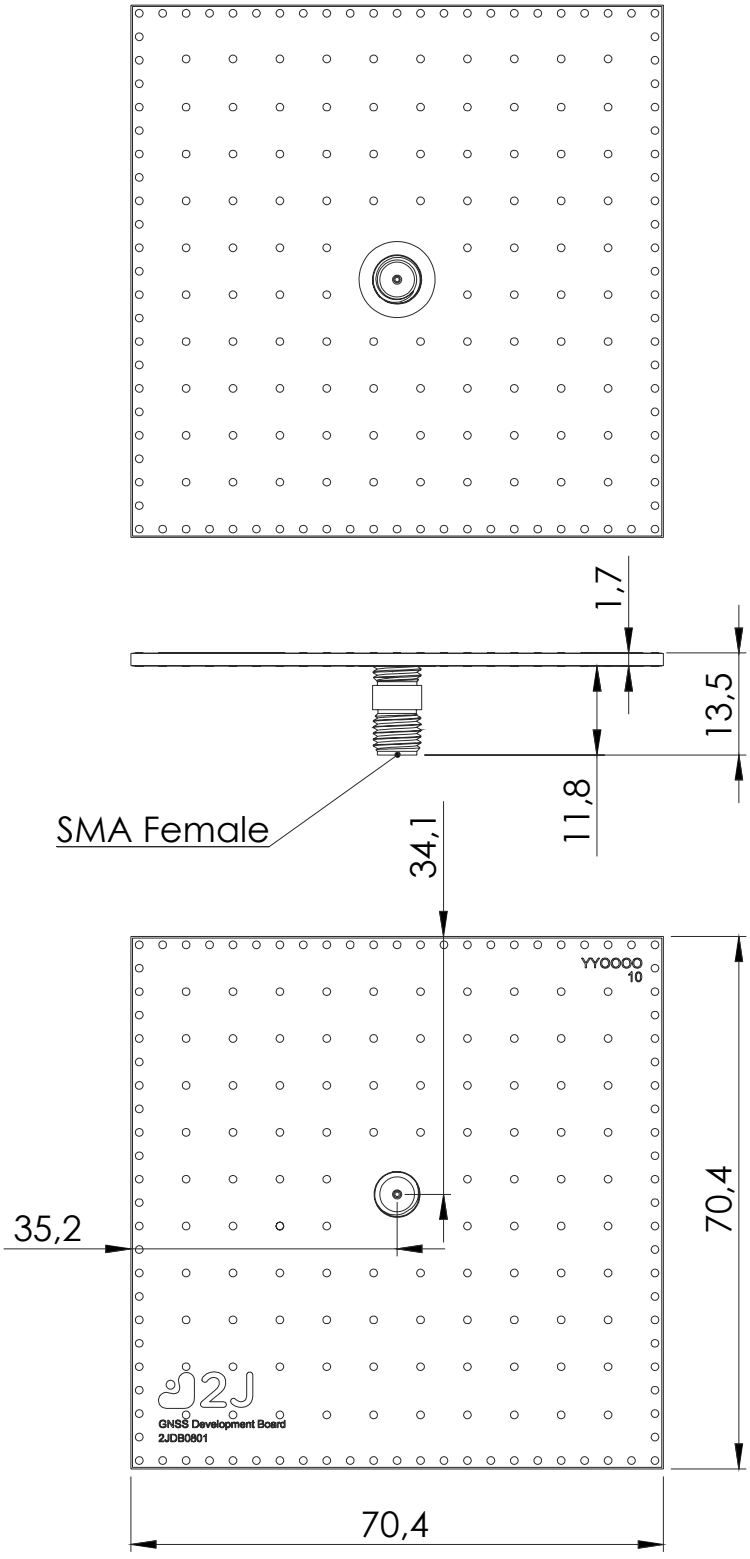
Layout for top layer



Layout for bottom layer



2JDB0801 Development board



5. Antenna Images

