2JCP2543101c

GNSS/L1L5 Ceramic Thru-Hole Mount

Key Features

GPS/QZSS/Galileo/L1L5
- 1176 and 1575 MHz
Thru-Hole Mount
Single Feed
High Gain
Ground Plane Dependent
Dimensions 25 × 25 × 4 mm



1. Antenna and electrical specifications

Parameters	GNSS Active Antenna	
Technologies	GPS/QZSS/Galileo/L1L5	
Bandwidth (MHz)	1176	1575
Bands	L5	L1
Frequency (MHz)	1176.45	1575.42
Standards	GPS(L5), BeiDou(B2a), QZSS(L5), Galileo(E5a), IRNSS(L5)	GPS(L1C/A), QZSS(L1C/A), Galileo(E1B/C)
Return Loss (dB)	~-31.3	~-38.7
VSWR	~1.1	~1.0
Efficiency (%)	~40.8	~76.3
Passive Peak Gain (dBi)	~0.5	~4.3
Average Gain (dB)	~-3.9	~-1.2
Impedance (Ohms)	50	
Radiation Pattern	Hemispherical	
Polarization	RHCP	

Antenna Measurement Conditions:

Free Space

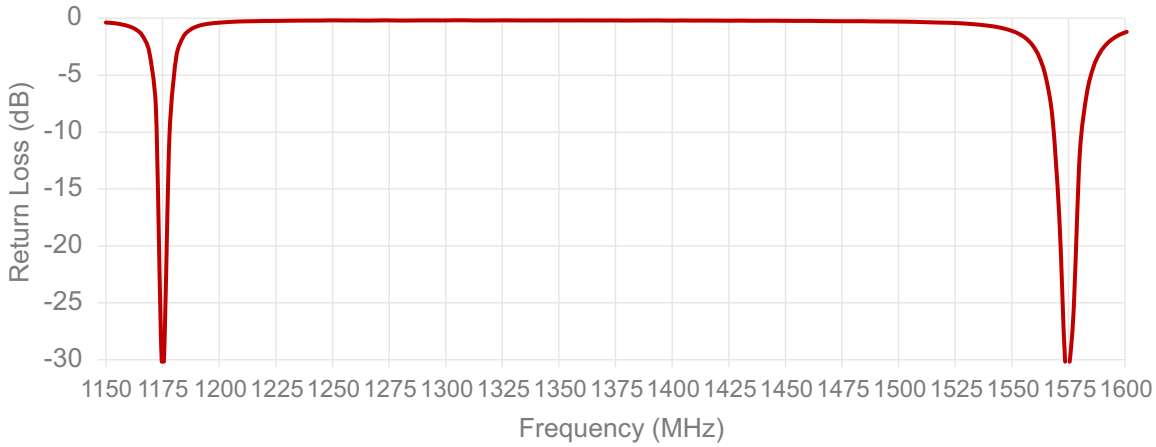
Mounted on Ground Plane of 70 x 70 mm

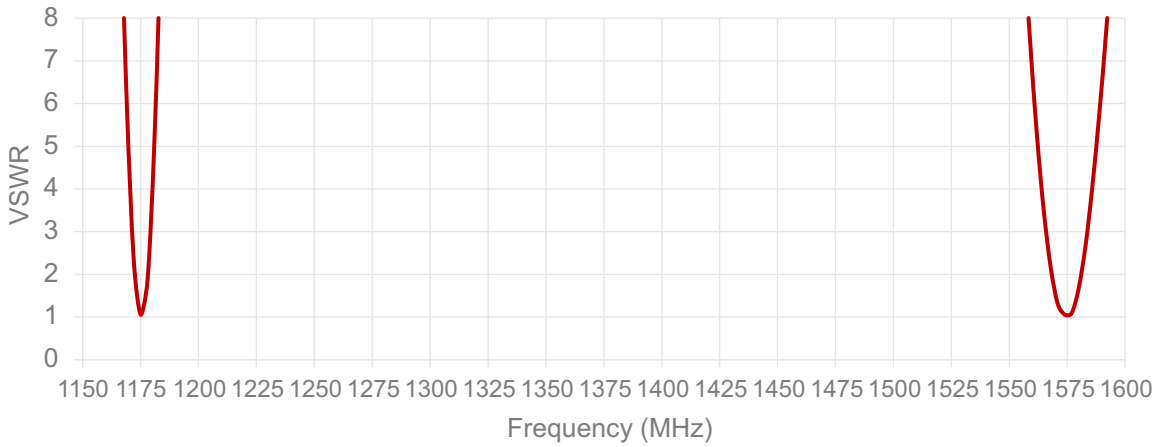
Measured in Certified CTIA 3D Anechoic Chamber

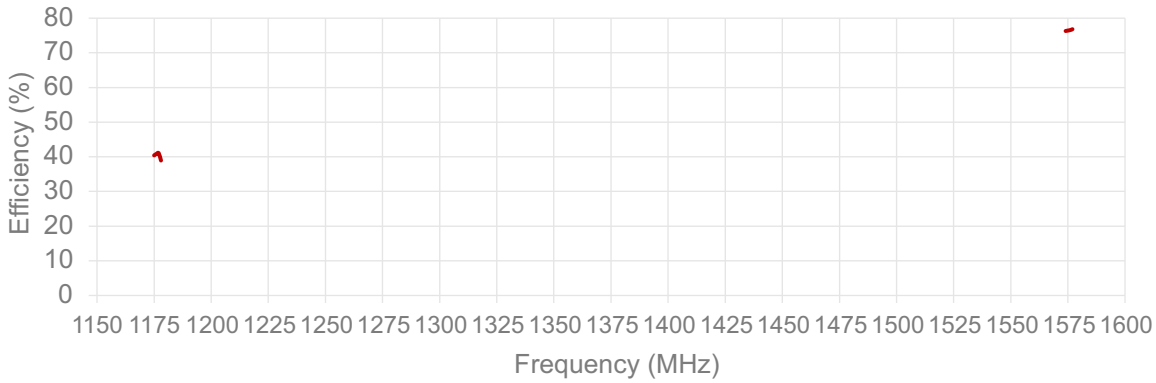
2. Mechanical and environmental specifications

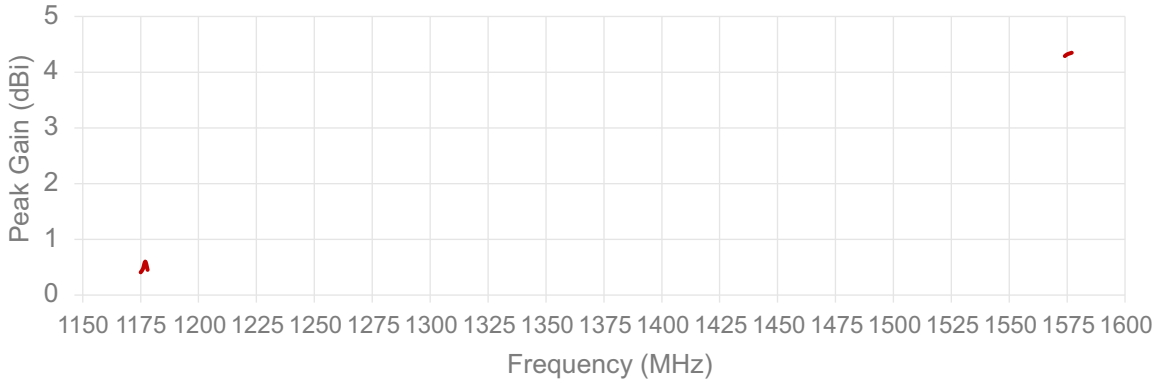
Specifications	2JCP2543101c
Mounting Type	Thru-Hole Mount
Adhesive	Nitto 5000NS
Dimensions (mm)	25 × 25 × 4
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS

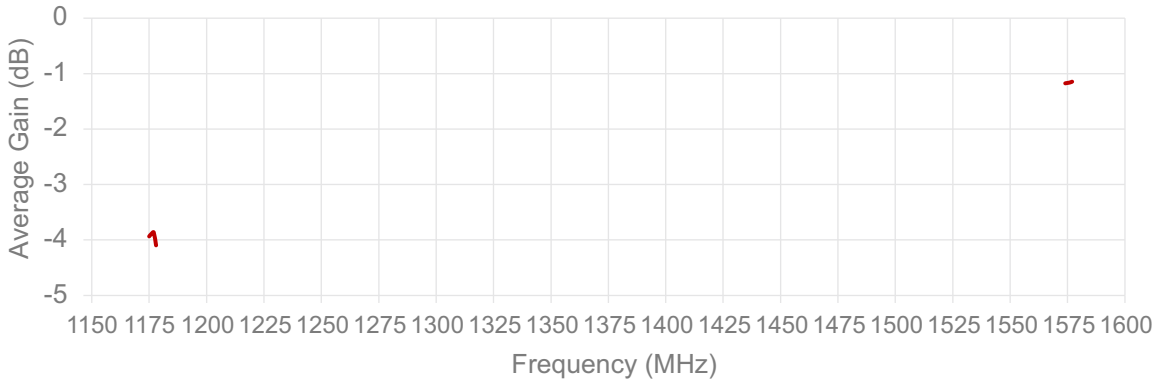
3. Antenna parameters

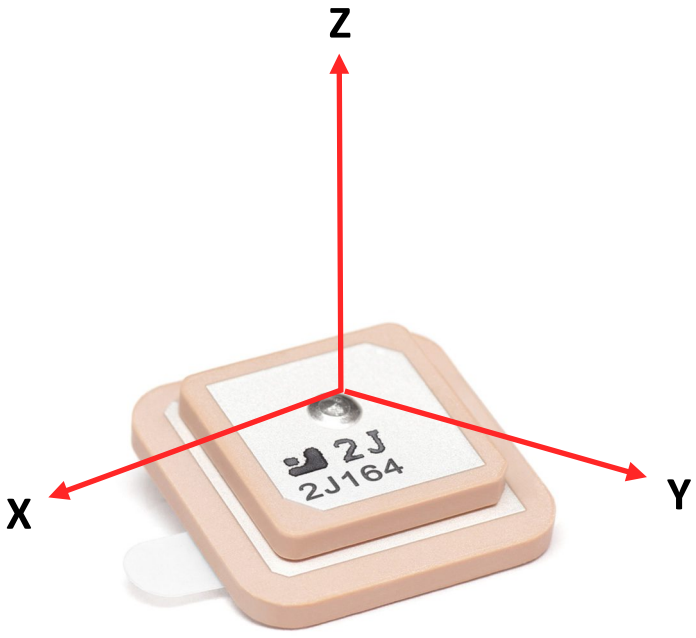




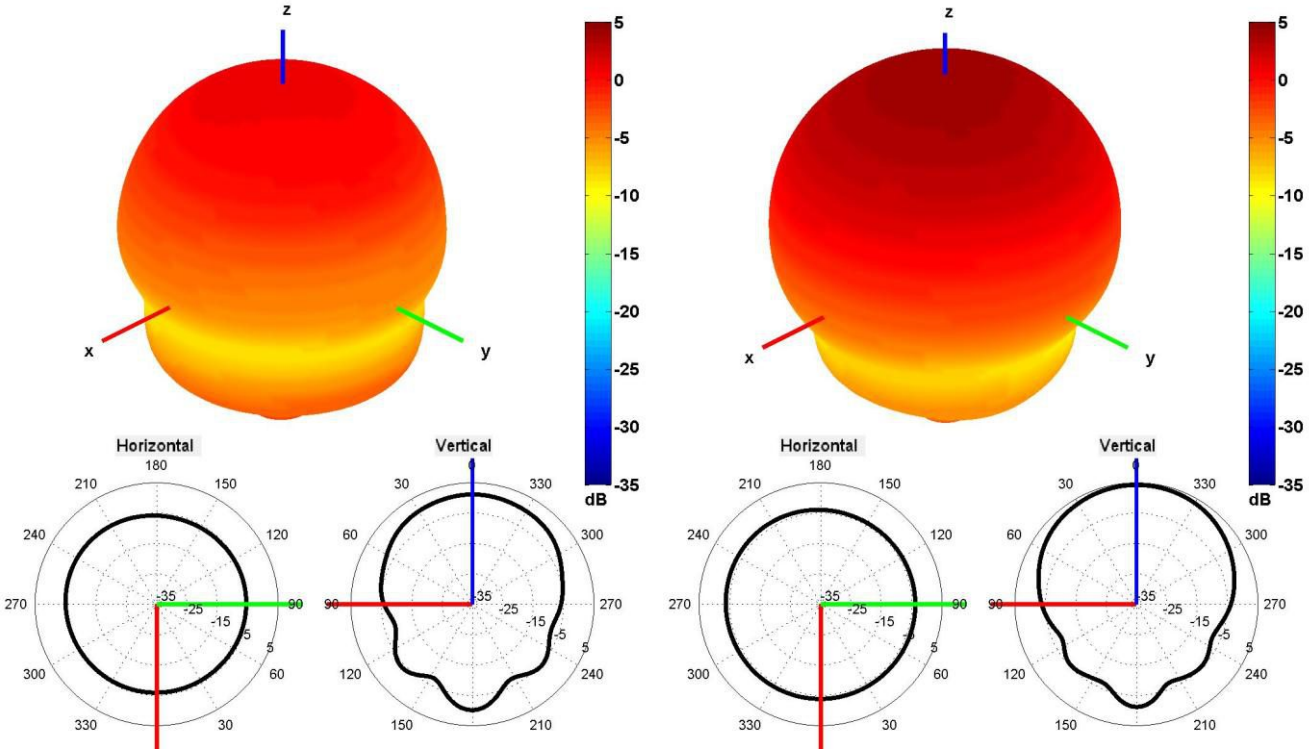

80
70
60
50
40
30
20
10
0
Efficiency (%)
1150 1175 1200 1225 1250 1275 1300 1325 1350 1375 1400 1425 1450 1475 1500 1525 1550 1575 1600
Frequency (MHz)


5
4
3
2
1
0
Peak Gain (dBi)
1150 1175 1200 1225 1250 1275 1300 1325 1350 1375 1400 1425 1450 1475 1500 1525 1550 1575 1600
Frequency (MHz)





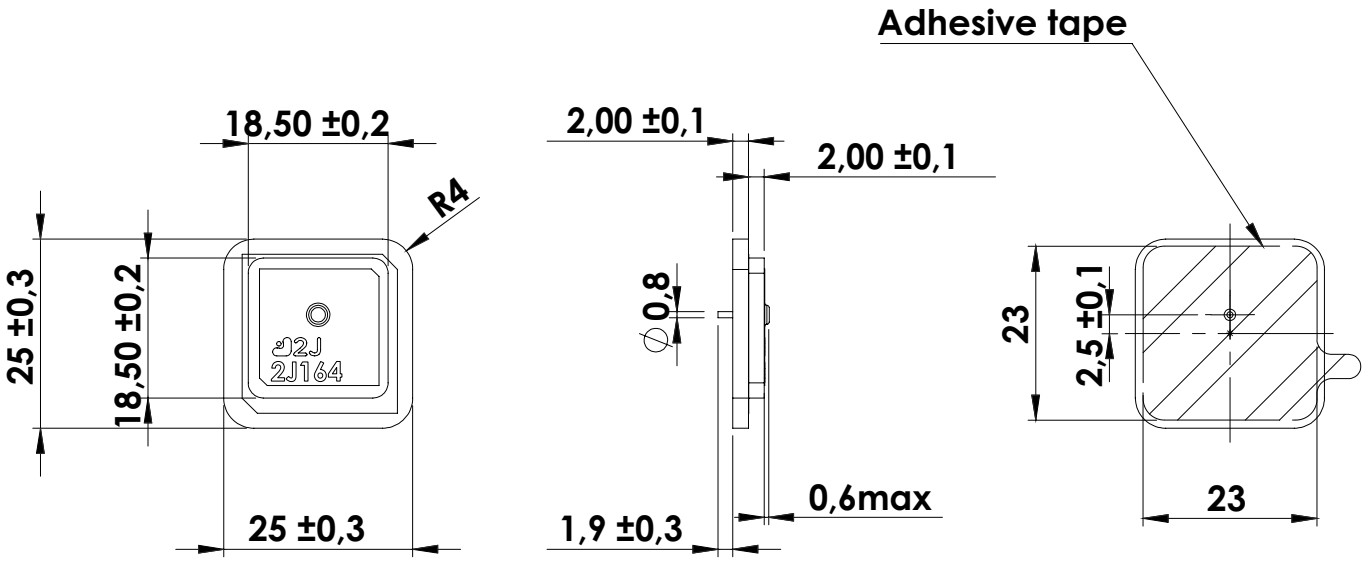
Radiation pattern reference



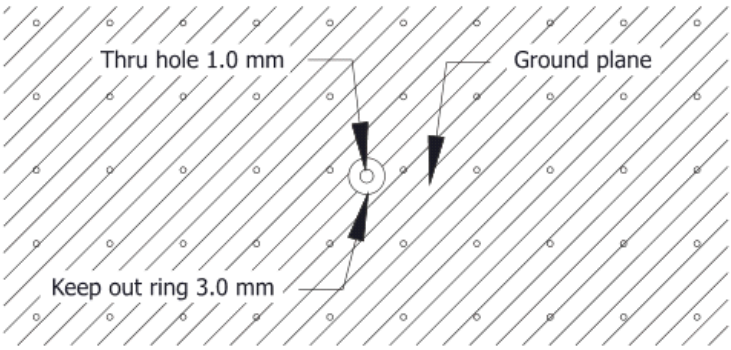
1176 and 1575 MHz Radiation pattern

4. Antenna drawings

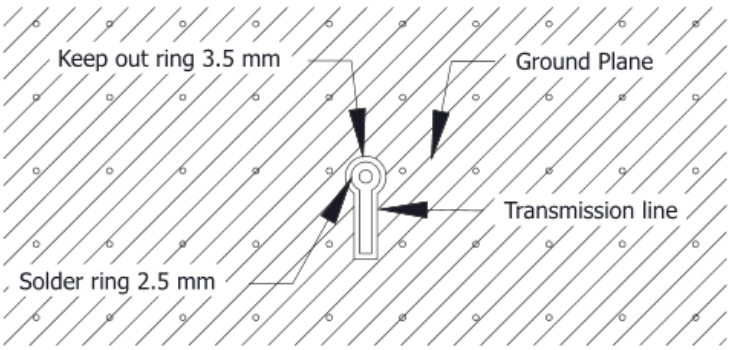
Patch Dimensions



Layout for top layer



Layout for bottom layer



5. Antenna Images

