

## Electrical Specifications

### 1. ANTENNA

Parameters	Specification	Unit
Frequency (F <sub>0</sub> )	1575.42 ± 1.023	MHz
Gain @ Zenith, typ	-1.5	dBic
Polarization	RHCP	-
Axial Ratio @ Zenith, max	3.0	dB
Patch Dimension	17 x 17 x 4	mm

### 2. LNA

Parameters	Specification	Unit
Frequency (F <sub>0</sub> )	1575.42 ± 1.023	MHz
Outer Band Attenuation, min	F <sub>0</sub> ±30MHz	6
	F <sub>0</sub> ±50MHz	20
	F <sub>0</sub> ±100MHz	25
Output Impedance	50	Ω
Output VSWR, max	2.0	-
Pout at 1dB Gain, typ	-5	dBm
Compression Point, min	-9	dBm

### 3. LNA Gain, Power and Noise Figure

Parameters	Specification			Unit
Voltage, min/typ/max	1.8	3.0	5.5	V
LNA Gain, typ	21	28	31	dB
Input Current, typ	3.3	7.5	15.5	mA
Noise Figure, typ	2.7	2.5	2.7	dB

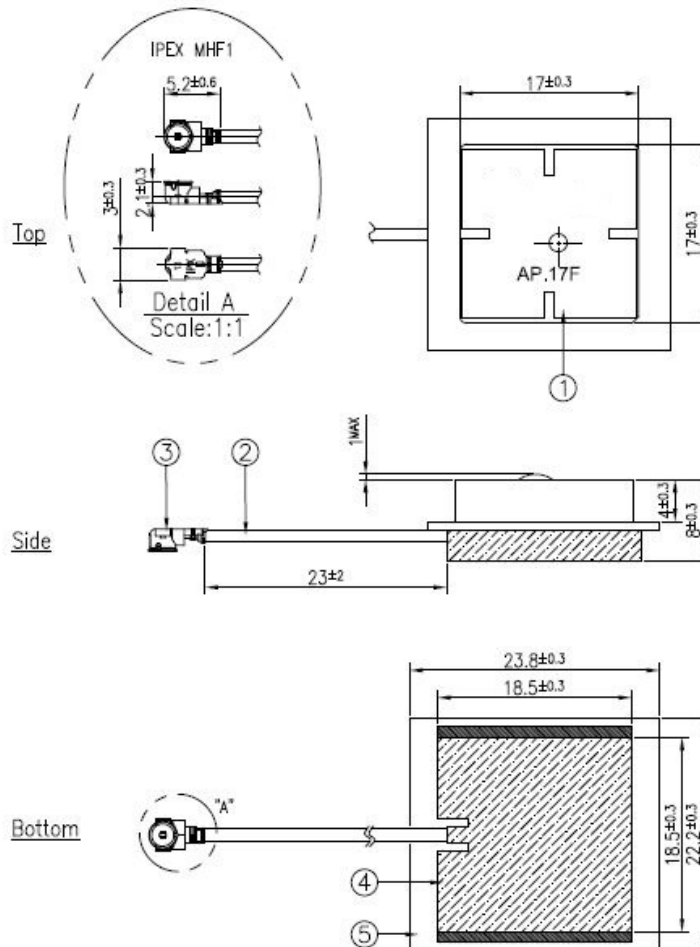
### 4. Cable and Connector

Parameters	Specification	Unit
RF Cable	Length	23.0 ± 2.0
	Diameter	1.13 ± 0.1
RF Connector	IPEX (MHF)	-

**5. Total Specification (Antenna, LNA, Cable and Connector)**

Parameters	Specification	Unit
Frequency (F <sub>0</sub> )	1575.42 ± 1.023	MHz
Gain @ 3V, 90°	29.5 ± 3.0	dBic
Output Impedance	50	Ω
Polarization	RHCP	-
Output VSWR, max	2.0	-
Operating Temperature Range	-45 ~ +85	°C
Storage Temperature Range	-45 ~ +85	°C
Relative Humidity	40 ~ 95	%
Input Voltage min/typ/max	1.8 / 3.0 / 5.5	V

**Mechanical Characteristics**



1. Patch 17x17x4mm
2. 1.13 Coaxial Cable
3. IPEX MHF1 Connector
4. Shielding Case
5. PCB

Note: The connector position has special orientation to the PCB as shown in the drawing (Bottom "A")

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