

Electrical Specifications

1. ANTENNA

Parameters	Specification	Unit
Frequency (F ₀)	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 ₀)	1575.42 ± 1.023	MHz
Outer Band Attenuation, min	F ₀ ±30MHz	6
	F ₀ ±50MHz	20
	F ₀ ±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

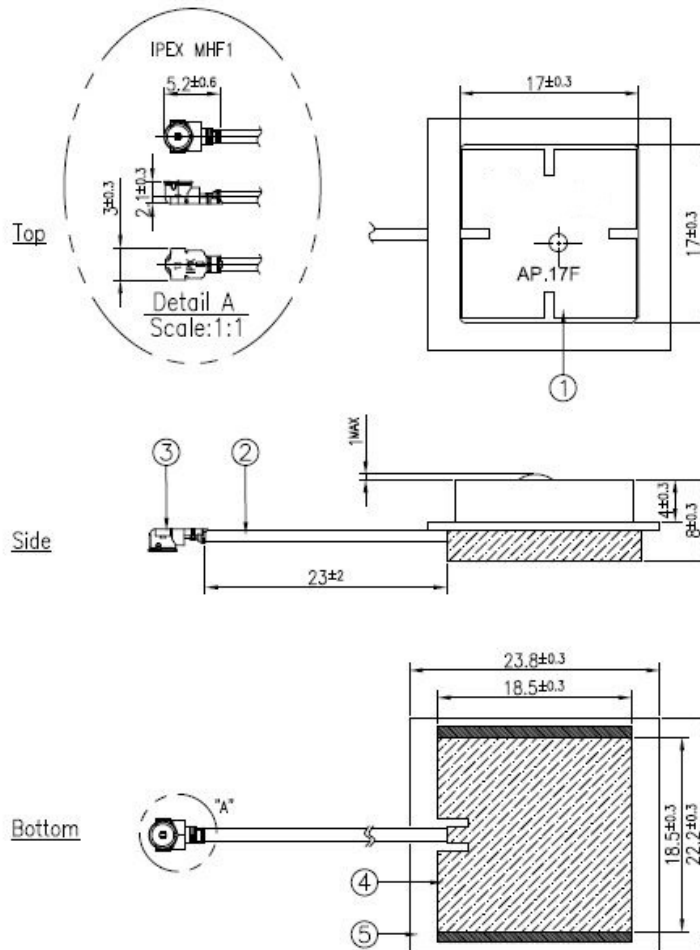
4. Cable and Connector

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 ₀)	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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