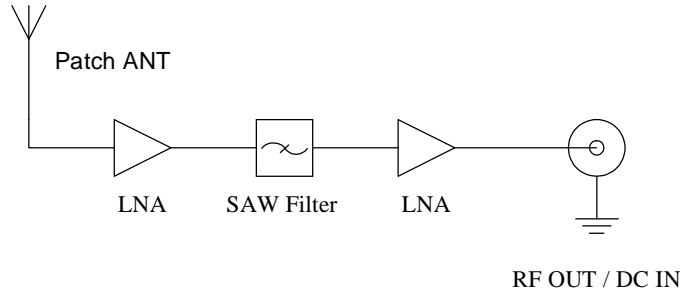


SPK ELECTRONICS CO., LTD.

SPECIFICATION FOR GPS ANTENNA WITH LOW NOISE AMPLIFIER

1.0 SYSTEM

This antenna system consists of two functional blocks, the LNA portion and the patch antenna.



2.0 GENERAL

2.1 ENVIRONMENTAL CONDITIONS

2.1.1	Operation Temperature	-40°C to + 90°C
2.1.2	Storage Temperatur	-40°C to + 100°C
2.1.3	Relative Humidity	40% to 95%

2.2 ELECTRICAL SPECIFICATIONS

2.2.1	Input Voltage	Min:2.7 V	Typ: 3.0V	Max:5.0V
2.2.2	Power Consumption	Typ: 13mA@3 V		Max: 40mA

2.3 CABLE & CONNECTOR

2.3.1	RF Cable	RF Coaxial Cable, 2.7 ± 0.2mm, RG-174 L =3M/5M/6M +/- 5 cm Optional
2.3.2	RF Connector	SMA PLUG or Optional

3.0 ANTENNA

3.1	Antenna Dimensions	25mm*25mm*4mm
3.2	Frequency Range	1575.42 ± 1.023 MHz.
3.3	GAIN	4 dBic Typ. @zenith (For 70mm*70mm Ground)
3.4	Polarization	RHCP
3.5	Axial ratio	Max 3.0dB@zenith (For 70mm*70mm Ground)

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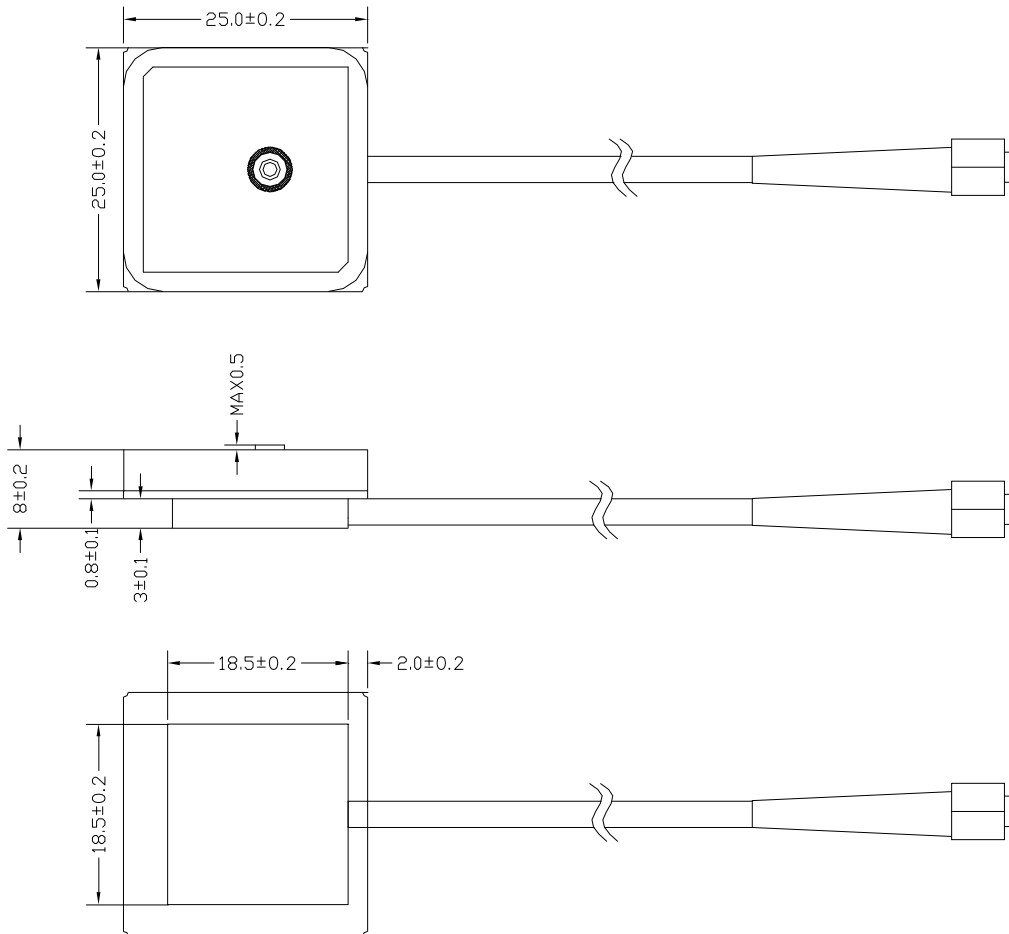
4.0 LNA

4.1	Frequency Range	1575.42 ± 1.023 MHz
4.2	Gain	Min.25dB Typ.28dB (+ 25 °C ± 5°C)
4.3	Noise Figure	1.6dB Max. (+ 25 °C ± 5°C)
4.4	Output Impedance	50
4.5	Output VSWR	2.0 Max

5.0 TOTAL SPECIFICATIONS (Through Antenna, LNA, Cable and Connector)

5.1	Frequency Range	1575.42 ± 1.023MHz
5.2	Gain	At 90° 32±3dBic (For 70mm*70mm Ground)
5.3	Output Impedance	50

6.0 OUTLINE



Unit:mm

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