

GPS Antenna Module Specification

GPS-PCB-12x12-1.13mm-10cm-U.FL

1. Explanation of Part Number

<u>G</u>	<u>M004</u>	<u>D</u>	<u>1</u>	<u>3</u>	<u>3</u>	<u>07</u>	<u>1</u>	<u>S</u>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

(1) Product Type
GPS Antenna

(7) Connector Type

07 : U.FL Plug

(2) Appearance Series
M004(12x12x6)

(8) Filter Type
1 : SAW

(3) Radome
D : With Radome

(9) Remark
S : Standard

(4) Voltage
1 : 2.3 ~ 5.5 V

C : Customer special requirements

(5) Cable Type
3 : Wire $\phi 1.13$

(6) Cable Length
3 : 100mm

2. Application:

For antenna units used with or in automobile (50 Ω impedance).

3. Appearance:

Antenna Unit

Dimensions 11.90x11.90x 6.35mm

Weight 4.35 $\pm$ 1g (typ)

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4. Operating Condition:

Temperature -40 to +90 °C

Humidity 10 to 95% RH

5. Storage Condition:

Temperature -40 to +90 °C

Humidity 10 to 95% RH

6. Electrical Specification:

· All values are defined at $25 \pm 15^\circ\text{C}$, $65 \pm 20\% \text{RH}$, power handling 1 u watt, air pressure $960 \pm 100 \text{ HPA}$ unless noted.

· Patch characteristics are measured with 50x50 mm ground plane in an anechoic chamber.

6-1) Patch

Characteristics	Specification
Center Frequency	1575.42±1.023 MHz (when covered with a radome and measured by LNA ground plane)
Bandwidth (10dB return loss)	5 MHz min @S11 ≤ -10dB
Gain at Zenith	1 dBic typ
Gain at 10° elevation	-7 dBic min
Polarization	R.H.C.P
Axial Ratio	3 dB typ

6-2) Filter / LNA

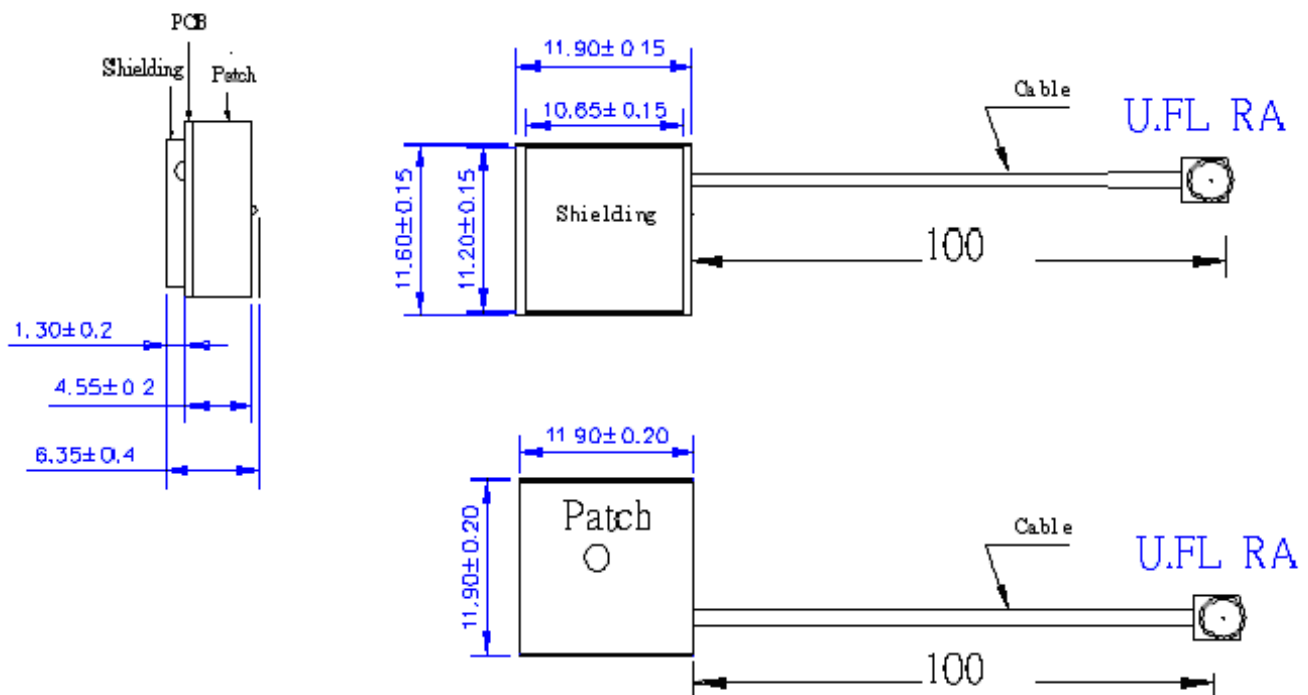
Characteristics	Specification
Center Frequency	1575.42±1.023 MHz
Gain	27 dB typ
Noise Figure	1.5 dB typ
Output V.S.W.R	2.0 max

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Voltage	2.3~5.5 V
Current	2.5 V : 6.6 mA Typical
	3 V : 8.6 mA Typical
	4 V : 12.6 mA Typical
	5 V : 16 mA Typical

7. Patch, and Shielding Dimensions:



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