GPS Antenna Module Specification

GPS-PCB-15x15-1.13mm-10cm-MMCX R/A

1. Explanation of Part Number

G	M003	D	1	3	3	8	1	S
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

(1) Product Type
GPS Antenna

(2) Appearance Series
M003(15x15)

(3) Radome
D : With Radome

(4)Voltage
1 : 2.3 ~ 5.5 V

(5)Cable Type
3 : Wire ϕ1.13

(6)Cable Length
3 : 100mm

(7) Connector Type
08 : MMCX RA Plug

(8) Filter Type
1 : SAW

(9) Remark
S : Standard
C : Customer special requirements

2. Application:

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

3. Appearance:

Antenna Unit
Dimensions 15.00x15.00x7.45mm
Weight 5.85±1g (typ)

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4. Operating Condition:

Temperature -40 to +90 ℃
Humidity 10 to 95% RH

5. Storage Condition:

Temperature -40 to +90 ℃
Humidity 10 to 95% RH

6. Electrical Specification:

- All values are defined at 25±15℃,65 ± 20%RH , power handling 1 u watt , air pressure 960±100 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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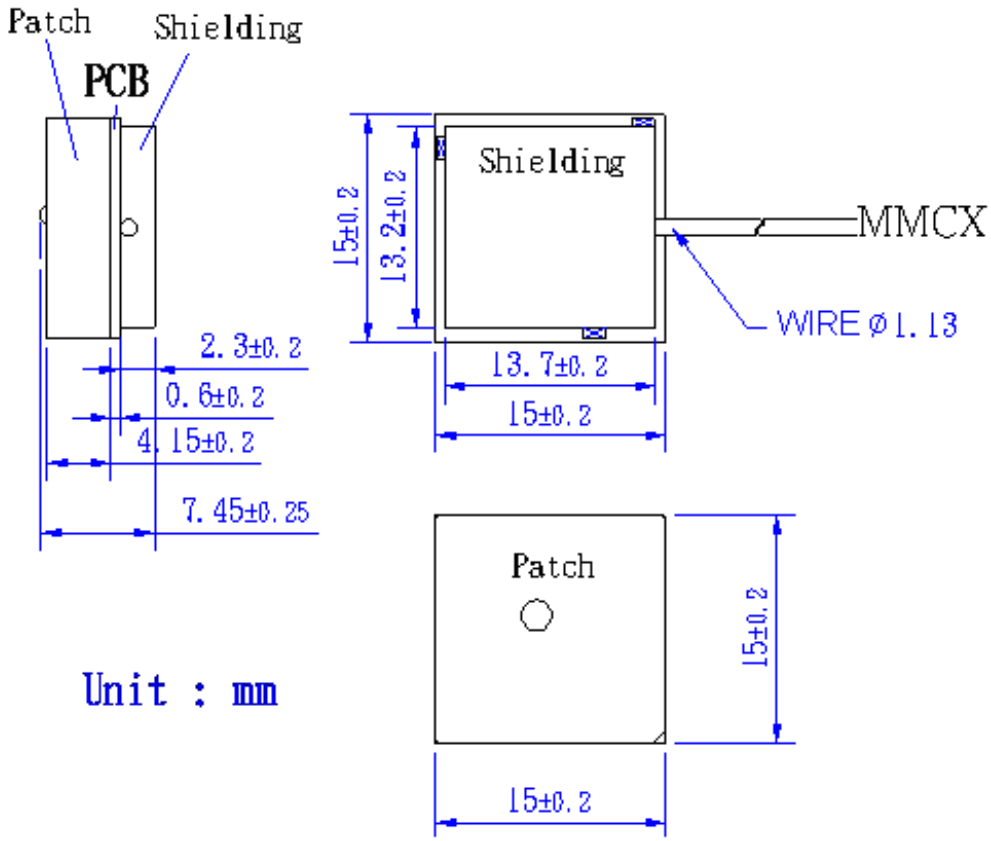
Voltage	2.3~5.5 V
Current	2.5 V：6.6 mA Typical
	3 V：8.6 mA Typical
	4 V：12.6 mA Typical
	5 V：16 mA Typical

7. Patch, and Shielding Dimensions:



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