

# MDL GPS/N-3V3 N/C RG-174 10cm 1 GPS10N-D3-14-A

## 1. Application:

This application shall apply for antenna unit which shall be used with an engine for an automobile.(for impedance 50Ω)

## 2. Appearance:

Antenna Unit (with radome, connector, and cable – refer to an attached drawing)

Dimensions	25*25*3.2mm	;	Radome	#N
Weight	25±5 g (typ)	;	Connector	N/C
Cable	RG-174 10cm	;	Antislip pad	NO
Lable	NO	;	Magnet	NO

## 3. Operating Condition:

Temperature	-40 to +90°C
Humidity	10 to 95% RH

## 4. Storage Condition:

Temperature	-40 to +90°C
Humidity	10 to 95% RH

## 5. Electrical Specification:

\* All value are defined at 25±15°C, 65±20% RH, power handling 1 u watt, air pressure 960 ± 100 HPA unless otherwise noted.

\* Patch characteristics are measured with 70x70 mm ground plane in an anechoic chamber.

### 5-1 Patch

Characteristics	Specification
Center Frequency	1575.42±1.023 MHz (when covered with a radome and measured by 70*70mm ground plane)
Bandwidth (10dB return loss)	10 MHz min
Gain at Zenith	5.0 dBic typ
Gain at 10° elevation	- 1.0 dBic min
Polarization	R.H.C.P
Axial Ratio	1.0 dB typ

UNLESS OTHER SPECIFIED TOLERANCES ON :

X = ±                      X.X = ±                      X.XX =  
 ANGLES = ±                      HOLE DIA = ±



**INPAQ TECHNOLOGY CO., LTD.**

SCALE :

UNIT : mm

DRAWN By : 蕭富美

CHECKED BY: 曾源標

DESIGNED BY : 蔡岳霖

APPROVED BY : 曾泓瑋

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**Preliminary**

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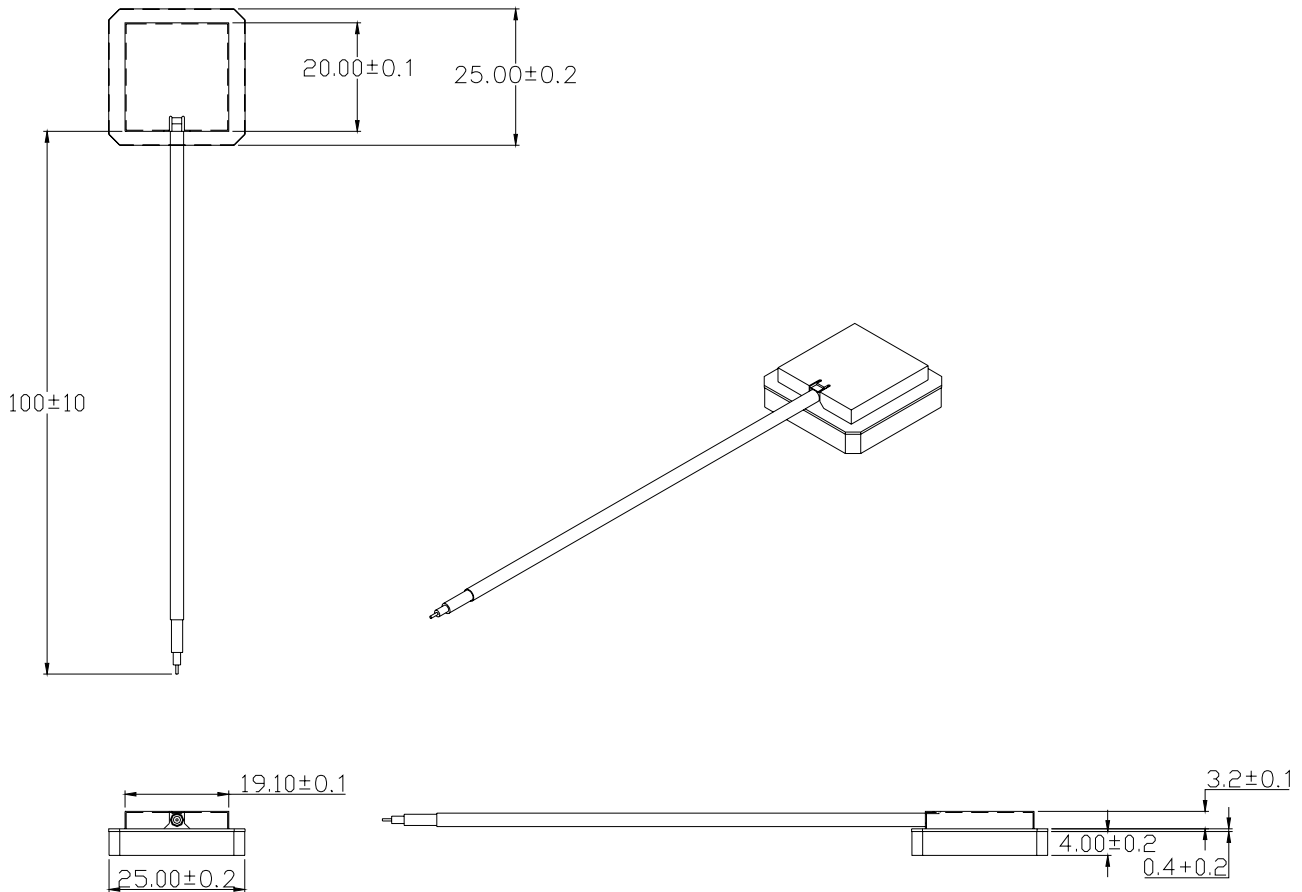
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### 5-2 Filter / LNA

Characteristics		Specification
Center Frequency		1575.42 ±1.023 MHz
Gain		27 dB typ
Noise Figure		1.5 dB typ
Filter Out band attenuation		Dielectric 7dB min           fo±20MHz 20dB min         fo±50MHz 30dB min         fo±100MHz (fo=1575.42MHz)
Output V.S.W.R		2.0 max
Voltage	3.3V	DC =3.3±0.6V
Current	3.3V	12mA TYP 15mA max

### 6. Antenna Dimensions:

L=100±10mm



UNLESS OTHER SPECIFIED TOLERANCES ON :

X = ±            X.X = ±            X.XX = ±  
 ANGLES = ±            HOLE DIA = ±



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