

# MDL GPS/N-3V3 HRS UFL $\phi$ 1.13 55mm GPS322N-S3-00-A

## 1. Application:

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

## 2. Appearance:

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

Dimensions	32.35*26*4.85mm (typ);	Radome	#N
Weight	8 $\pm$ 1 g	Connector	HRS UFL
Color	Gray	Cable	$\phi$ 1.13 55mm
PCB	lead free		

## 3. Operating Condition:

Temperature -40 to +90  $^{\circ}$ C

## 4. Storage Condition:

Temperature -40 to +90  $^{\circ}$ C  
Humidity 65 $\pm$ 20 % RH

## 5. Electrical Specification:

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

\* Patch characteristics are measured with test ground plane in an anechoic chamber.

### ■ Patch Specification.

Characteristics	Specification
Center Frequency	1575.42 $\pm$ 2 MHz (For test housing)
Bandwidth (10dB return loss)	9.0 MHz min
Gain at Zenith	1 dBic typ
Axial Ratio at Zenith	3.0dB typ
Gain at 10 $^{\circ}$ elevation	- 6.1 dBic typ
Polarization	R.H.C.P

### ■ Filter/LNA Specification.

Characteristics	Specification
Center Frequency	1575.42 $\pm$ 1.023 MHz
Gain	30 $\pm$ 2dB (at 3.3 $\pm$ 0.1V)
Noise Figure	1.4 dB typ and 2.0 dB max
Output V.S.W.R	2.0 max
Current	7.5 $\pm$ 2 mA (at 3.3 $\pm$ 0.1V)

### ■ Overall Specification. (Through Antenna, LNA, without cable loss)

Characteristics	Specification
Center Frequency	1575.42 $\pm$ 1.023 MHz (for specified ground plane)
Gain at Zenith	31 dBic typ (for specified ground plane)
Output Impedance	50ohm
Output VSWR	2.0 max
Operation Voltage	2.7V~3.6V
Current	7.5 $\pm$ 2 mA (DC=3.3 $\pm$ 0.1V)

UNLESS OTHER SPECIFIED TOLERANCES ON :

X $\pm$  X.X $\pm$  X.XX $\pm$   
 ANGLES =  $\pm$  HOLE DIA =  $\pm$



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY : 巫冠賢 巫冠賢

CHECKED BY : 楊奇峰 邱子敏代

DESIGNED BY : 嚴勝龍 嚴勝龍

APPROVED BY : 曾源標 曾源標

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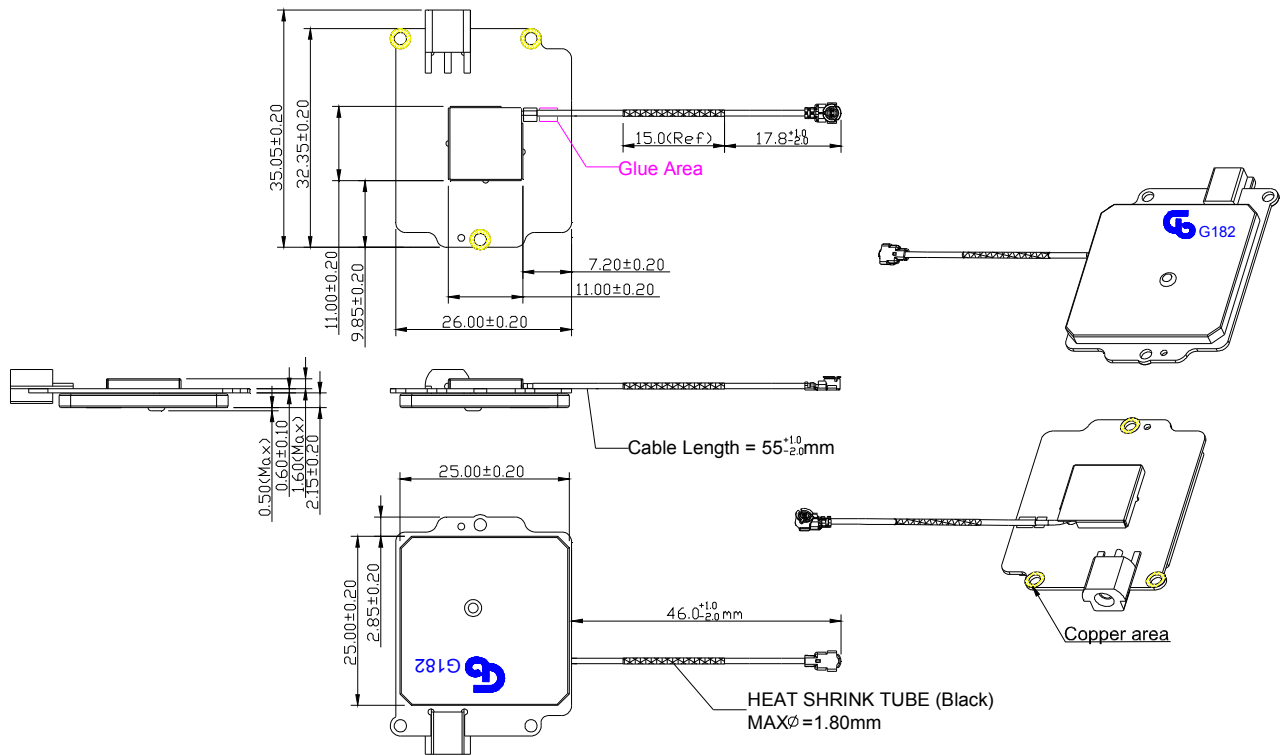
TITLE : MDL GPS/N-3V3 HRS UFL  $\phi$  1.13 55mm  
GPS322N-S3-00-A

DOCUMENT NO.

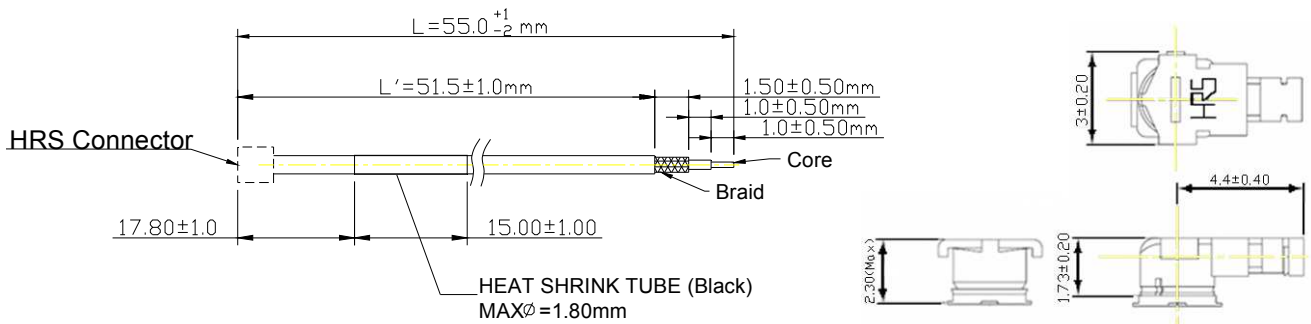
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## 6. Antenna Dimensions: (unit: mm)



## 7. Cable Length:



Connector : HRS UFL , Cable : RF Cable 1.13 , L : 55±<sup>1</sup>/<sub>2</sub> mm

Heat Shrink Tube : Black (此為示意圖，其成品內應有線徑標示“HRS”)

UNLESS OTHER SPECIFIED TOLERANCES ON :

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



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