

MDL GPS/N-3V0 I-PEX MHF ψ 1.13 70mm GPS145N-S3-01-A

1. Application:

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

2. Appearance:

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

Dimensions	28*20*6.4 mm	;	Radome	#N
Weight	8.3 \pm 1.5 g (typ)	;	Connector	I-PEX MHF
Color	gray	;	Cable	minicoaxial 1.13 70mm

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 \pm 15 °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.

5-1 Patch

Characteristics	Specification
Center Frequency	1575.42 \pm 2 MHz (when covered with a radome on LNA ground plane.)
Bandwidth (10dB return loss)	10 MHz Typ
Gain at Zenith	-1.5 dBic typ(for specified ground)
Gain at 10° elevation	-2.5 dBic typ
Polarization	R.H.C.P
Axial Ratio	3.0dB typ(for specified mechanical & ground)

5-2 Filter / LNA

Characteristics	Specification
Center Frequency	1575.42 \pm 1.023 MHz
Gain	16 \pm 3dB typ(DC=3.0v)
Noise Figure	1.5 dB typ(DC=3.0v)
Output V.S.W.R	2 max(DC=3.0v)
Voltage	3.0 \pm 0.3V
Current(DC= 3.0 \pm 0.01V)	5.0 \pm 2.0mA

UNLESS OTHER SPECIFIED TOLERANCES ON :

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



INPAQ TECHNOLOGY CO., LTD.

SCALE :

UNIT : mm

DRAWN By : 巫冠賢 *巫冠賢*

CHECKED BY: 蘇皓昌 *蘇皓昌* 代

DESIGNED BY : 廖鴻錦 *Gene*

APPROVED BY : 蔡岳霖 *蔡岳霖*

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TITLE : MDL GPS/N-3V0 I-PEX MHF ψ 1.13 70mm
 GPS145N-S3-01-A

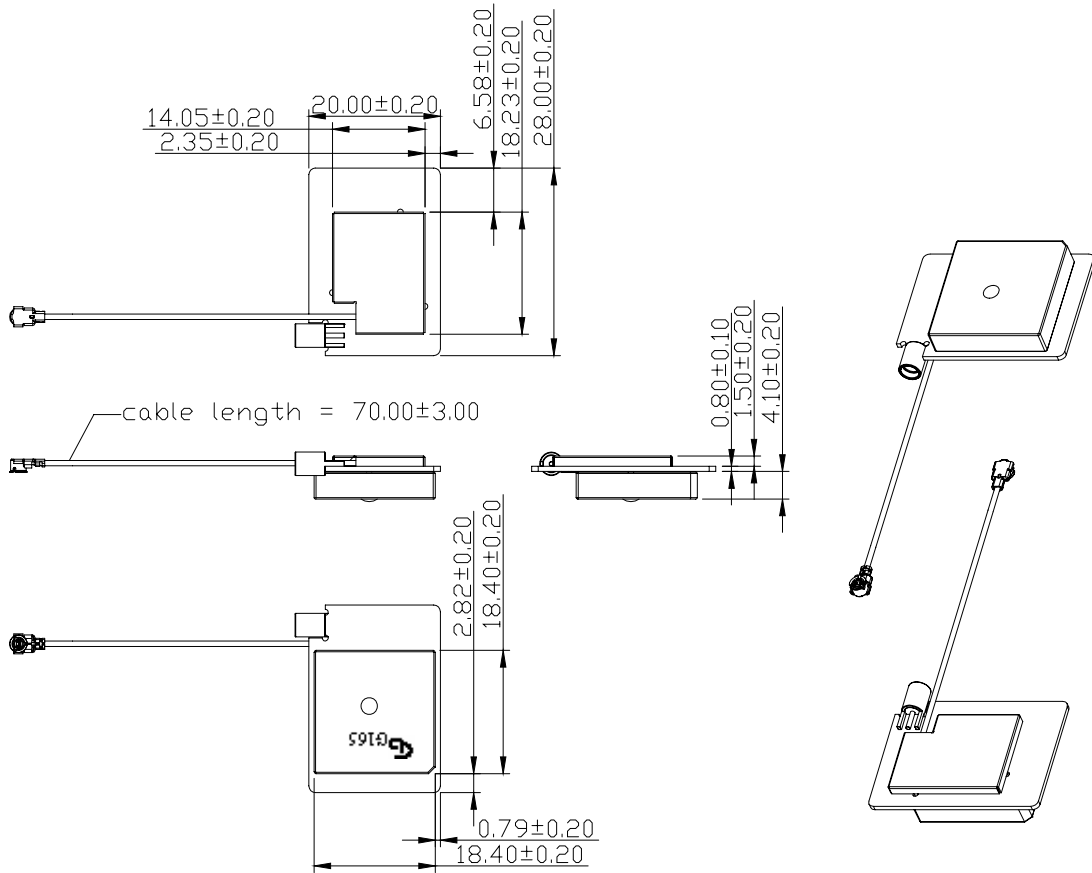
DOCUMENT NO.

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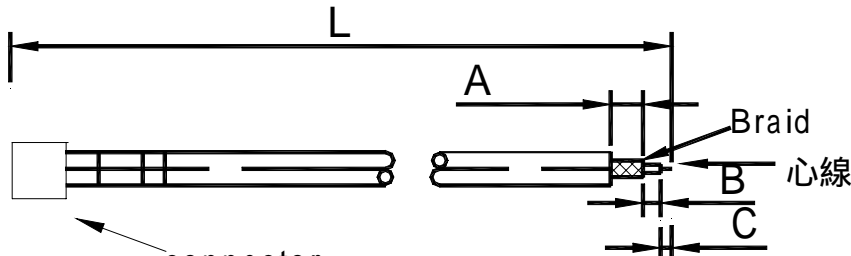
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6. Antenna Dimensions:



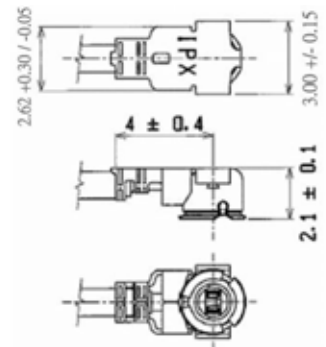
Cable length



Connector : I-PEX MHF , Cable : RF Cable 1.13(灰色)

L : 70±3mm A : 1.5±0.5mm B : 1±0.5mm C : 1±0.5mm

CONNECTOR: I-PEX MHF (此為示意圖，其圖一內應有線徑標示"13")



UNLESS OTHER SPECIFIED TOLERANCES ON :

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



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