

MDL,GPSLL1L2/U8W 2.7-5.5V SMA PLUG RG-174 5M 1

GPSLX09U8W-S6-00-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	65.0*65.0*23.5 mm	;	Radome	#N
Connector	SMA PLUG	;	Cable	RG174, 5000 mm
PCB	Lead free	;		

3. Operating Condition :

Temperature -40 to +85 °C

4. Storage Condition :

Temperature -40 to +85 °C
Humidity 65±20 % 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 in an anechoic chamber.

5-1 Patch Specification

Characteristics	Specification	
Frequency Range	L/L1: 1525 to 1606 MHz	L2 : 1197 to 1249 MHz
Center Frequency	1565.5 MHz	1223 MHz
Peak Gain	3.0 dBic typ	3.0 dBic typ
Polarization	R.H.C.P	
Zenith Axial Ratio	4 dB max	

The patch antenna performance is measured with the D=150 mm ground plane

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=± X.X=± X.XX=±
A N G L E S = ± H O L E D I A = ±



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY: 林純正

CHECKED BY: 林純正

DESIGNED BY: 許振璋

APPROVED BY: 蔡凱翔

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TITLE : MDL,GPSLL1L2/U8W 2.7-5.5V SMA PLUG
RG-174 5M 1 GPSLX09U8W-S6-00-A

DOCUMENT
NO.

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5-2 Filter/LNA Specification

Characteristics	Specification	
Frequency	L/L1: 1525 to 1606 MHz	L2 : 1197 to 1249 MHz
Gain	29±3dB(1525MHz)	30±3dB(1197MHz)
	30±3dB(1575.42MHz)	31±3dB(1226MHz)
	29±3dB(1606MHz)	32±3dB(1249MHz)
Noise Figure	5.0 dB typ	5.0 dB typ
Filter Outband attenuation	40.0dB TYP. @ fo±100MHz (fo = 1557 & 1606 MHz)	40.0dB TYP. @ fo±100MHz (fo = 1160 & 1240 MHz)
Output V.S.W.R	2.0 typ	2.0 typ
Operation Voltage	2.7-5.5V	2.7-5.5V
Current	28±3 mA	28±3 mA

5-3 Overall Specification (Through Patch and LNA without cable loss)

Characteristics	Specification	
Frequency	L/L1:1557~1606 MHz	L2 : 1197 to 1249 MHz
Gain	32±3dB(1525MHz)	33±3dB(1197MHz)
	33±3dB(1575.42MHz)	34±3dB(1226MHz)
	32±3dB(1606MHz)	35±3dB(1249MHz)
Output Impedance	50ohm	50ohm
Output V.S.W.R	2.0 typ	2.0 typ
Operation Voltage	2.7-5.5V	2.7-5.5V
Current	28±3 mA	28±3 mA

UNLESS OTHER SPECIFIED TOLERANCES ON :

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



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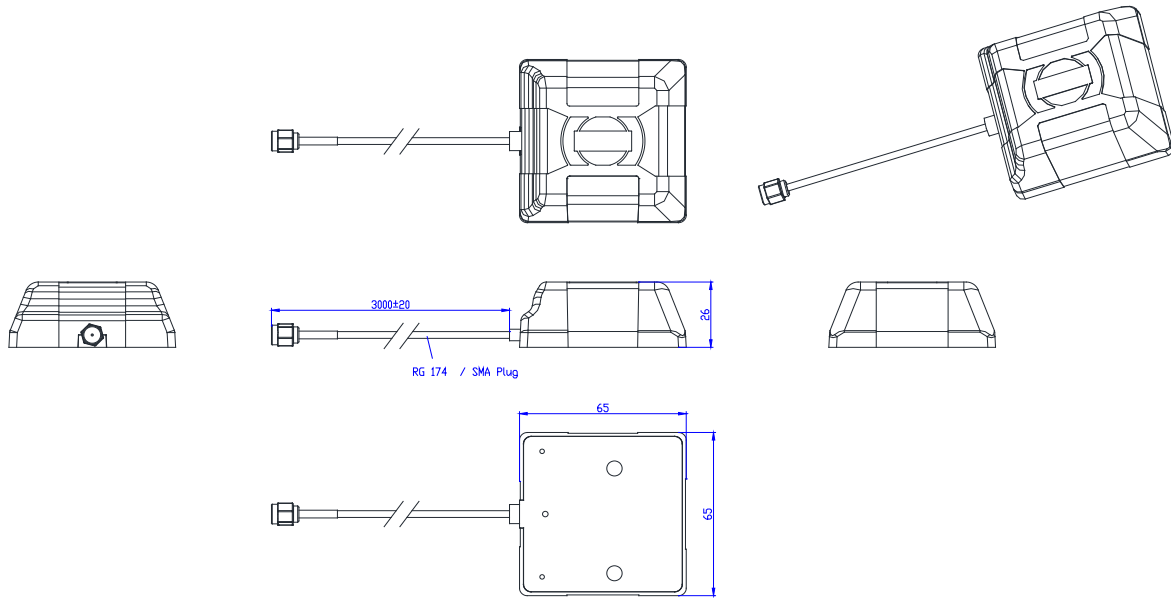
SCALE : N/A UNIT : mm
 DRAWN BY: 林純正 CHECKED BY: 林純正
 DESIGNED BY: 許振璋 APPROVED BY: 蔡凱翔

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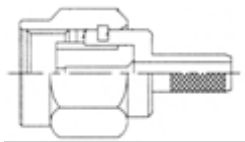
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6. Antenna Dimensions : (unit : mm)



Connector appearance: SMA PLUG (内牙公針)



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