

MDL GPSL1L5/G 3.0~5.0 V SMA PLUG RG174 3 M 6

GPSLX06G-S6-01-A Specification

1. Application

This product shall be applied as an antenna unit in positioning or timing system application.

2. Appearance

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

Dimensions	49.14*46.14*15.94 mm
Radome	#G
Connector	SMA PLUG
Cable	RG174/ 3 M
Magnet	YES
Adhesive	NO
Label	YES
Weight	110 g typ.

3. Operating Condition

Temperature	-40~+85 °C
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4. Storage Condition

Temperature	-40~+85 °C
Humidity	65±20 %RH

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=N/A X.X=N/A X.XX=N/A

ANGLES=N/A HOLEDIA=N/A



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY : 徐正熙

CHECKED BY : 鄭榮謀

DESIGNED BY : 李昇鴻

APPROVED BY : 蔡凱翔

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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 the 100 mm diameter ground plane in an anechoic chamber.

5-1. Patch

Characteristics	Specification	
Frequency Range	L1 : 1559~1608 MHz L5 : 1164~1186 MHz	
Peak Gain	1559 MHz	-1.2 dBic typ.
	1575.42 MHz	4.5 dBic typ.
	1602 MHz	-2.6 dBic typ.
	1176.45 MHz	4.0 dBic typ.
Polarization	RHCP	
VSWR	2.0 typ.	
Impedance	50 ohm	

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5-2. Filter / LNA

Characteristics	Specification		
Frequency Range	L1 : 1559~1608 MHz L5 : 1164~1186 MHz		
Gain	1559 MHz	29.0±3.0 dB (3.0 V) 30.0±3.0 dB (5.0 V)	
	1575.42 MHz	30.0±3.0 dB (3.0 V) 31.0±3.0 dB (5.0 V)	
	1602 MHz	28.0±3.0 dB (3.0 V) 29.0±3.0 dB (5.0 V)	
	1176.45 MHz	30.0±3.0 dB (3.0 V) 31.0±3.0 dB (5.0 V)	
Noise Figure	4.0 dB typ.		
Filter Out Band Attenuation	F ₁ = 1559 MHz	F ₁ -50 MHz	> 60 dB
		F ₁ -100 MHz	> 60 dB
	F ₂ = 1608 MHz	F ₂ +50 MHz	> 70 dB
		F ₂ +100 MHz	> 70 dB
	F ₃ = 1164 MHz	F ₃ -50 MHz	> 65 dB
		F ₃ -100 MHz	> 70 dB
	F ₄ = 1186 MHz	F ₄ +50 MHz	> 60 dB
		F ₄ +100 MHz	> 60 dB
Output VSWR	2.0 typ.		
Operation Voltage	3.0~5.0 V		
Current	17.0±3.0 mA (3.0 V)		
	19.0±3.0 mA (5.0 V)		

UNLESS OTHER SPECIFIED TOLERANCES ON :
 X=N/A X.X=N/A X.XX=N/A
 ANGLES=N/A HOLEDIA=N/A



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SCALE : N/A

UNIT : mm

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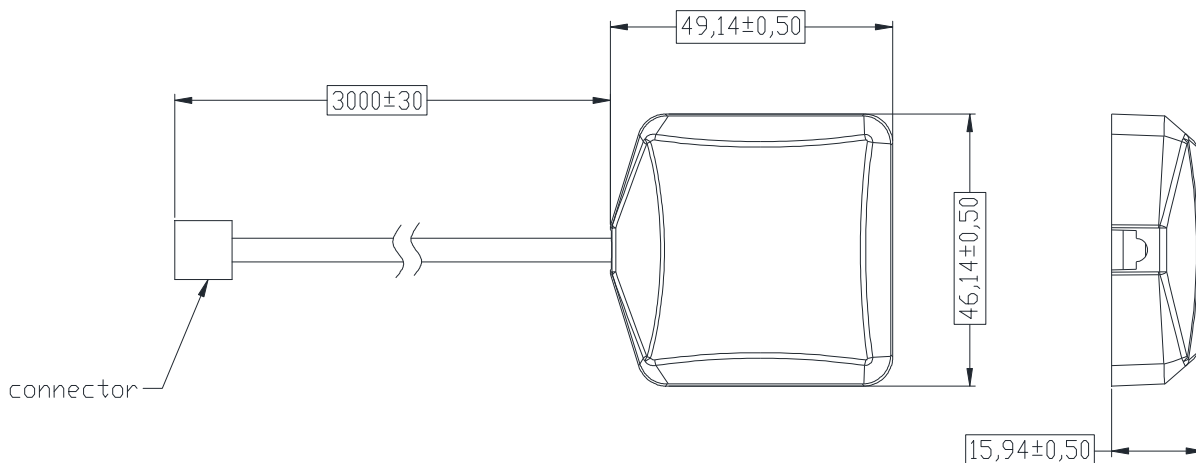
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5-3. Overall Specification (Through Antenna, LNA, Without Cable Loss)

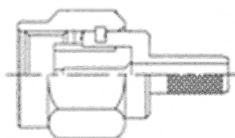
Characteristics	Specification	
Frequency Range	L1 : 1559~1608 MHz L5 : 1164~1186 MHz	
Gain	1559 MHz	27.8±3.0 dB (3.0 V) 28.8±3.0 dB (5.0 V)
	1575.42 MHz	34.5±3.0 dB (3.0 V) 35.5±3.0 dB (5.0 V)
	1602 MHz	25.4±3.0 dB (3.0 V) 26.4±3.0 dB (5.0 V)
	1176.45 MHz	34.0±3.0 dB (3.0 V) 35.0±3.0 dB (5.0 V)
Output VSWR	2.0 typ.	
Operation Voltage	3.0~5.0V	
Current	17.0±3.0 mA (3.0 V)	
	19.0±3.0 mA (5.0 V)	

6. Antenna Dimensions



1. "○" INDICATES PROCESS CONTROL DIMENSION.
2. "□" INDICATES CPK CONTROL DIMENSION.

6-1. Connector Appearance (SMA PLUG)



UNLESS OTHER SPECIFIED TOLERANCES ON :

X=N/A X.X=N/A X.XX=N/A

ANGLES=N/A HOLEDIA=N/A



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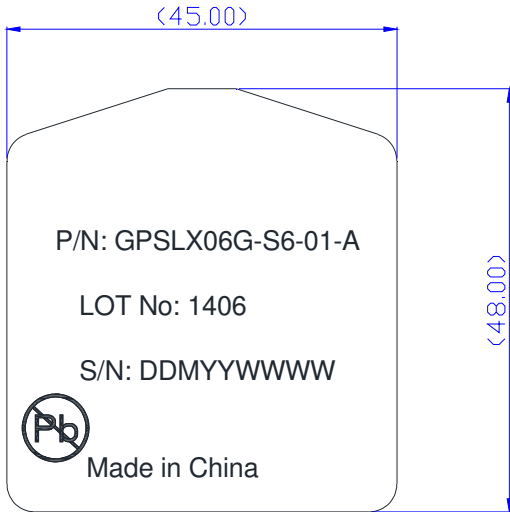
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6-2. Label Information



1. YEAR AND WEEKS (1406 → 2014 the sixth week)
2. Serial Number: DD M YY WWW
 DD=date, M=month (Jan. to Sep.=1~9, Oct.=0, Nov.=N, Dec.=D), Y=year (2009=09),
 WWW=original number of the unit produced on that day (0001~9999).

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SCALE : N/A	UNIT : mm		
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