

GPS10N-S3-85

Specification

Product Name	INPAQ RF Active Antenna
Series/PN	GPS10N-S3-85

PN : GPS10N-S3-85

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	25.0*25.0*6.76mm	; Radome	#N
Weight	11.11 ±1 g (typ)	; Connector	I-PEX MHF
Color	gray	; Cable	RF Φ1.13 160mm
PCB	lead free		

3. Operating Condition:

Temperature	-40 to +80°C
Humidity	10 to 95% RH

4. Storage Condition:

Temperature	-40 to +80°C
Humidity	20 to 65% 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 test ground plane in an anechoic chamber.

■ Patch Specification.

Characteristics	Specification
Center Frequency	1575.42±1.023(when covered with a radome on LNA ground plane.)
Bandwidth (10dB return loss)	10 MHz min
Gain at Zenith	2.0 dBic typ
Polarization	R.H.C.P
Axial Ratio	3.0dB typ(for PDA mechanical & ground 25.0x25.0mm)

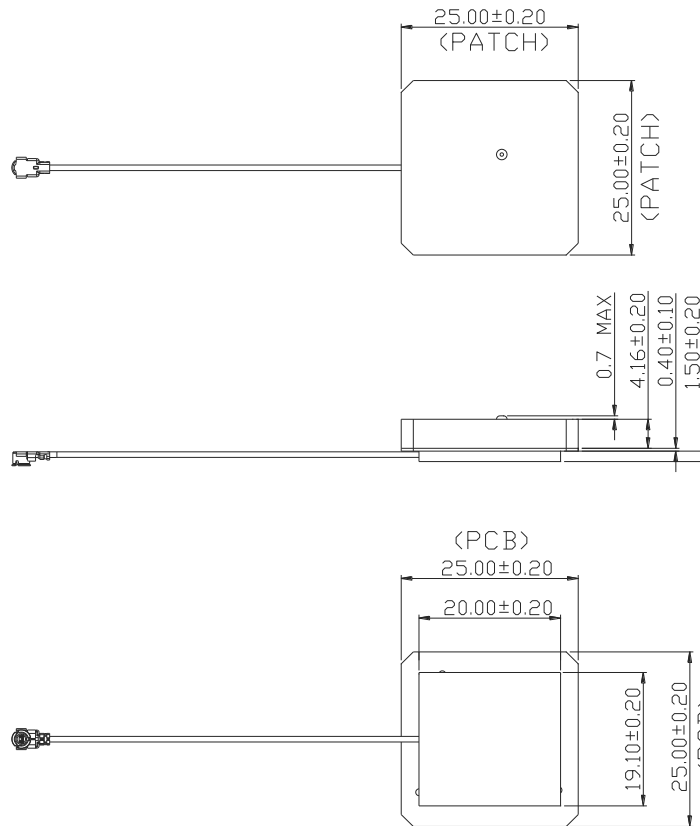
■ Filter/LNA Specification.

Characteristics	Specification
Gain	27±3dB (DC=3.0V)
Noise Figure	1.5 dB typ (DC=3.0V)
Output V.S.W.R	2.0 max (DC=3.0V)
Current (DC= 3.0±0.01V)	10±3mA

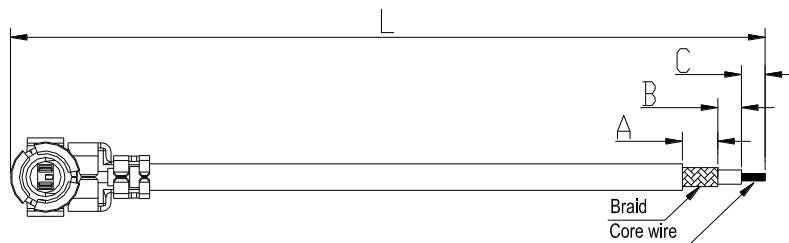
■ Overall Specification.

Characteristics	Specification
Center Frequency	1575.42±1.023 (when covered with a radome on LNA ground plane.)
Gain at Zenith	29dBic typ(for ground 25.0x25.0mm)
Output Impedance	50ohm
Output VSWR	2.0 typ
Operation Voltage	3.0 ±0.3V

6. Antenna Dimensions: (unit: mm)



7. Cable Length:



Connector : I-PEX MHF , **Cable :** RF Cable $\phi 1.13$ (Gray)
 $L : 160 \pm 2$ mm $A : 1.5 \pm 0.5$ mm $B : 1 \pm 0.5$ mm $C : 1 \pm 0.5$ mm