

## GPS 09 Active Antenna

### 1. Explanation of Product Number

G	0	9	3	8	2	9	9	0	0	0	0	1
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		

(1) Product type:

G: GPS

(2) Series code:

09

(3) Input voltage:

3: 2.7~5.5v

(4) Cable line length:

0:0m

1: 2±0.04m

2: 3±0.06m

3: 5±0.1m

8: 0.1±0.02m

(5)Cable type:

0: no cable

1: RG-174

2: kurabe 1.13mm

(6)Connector:

00: no connector

UNLESS OTHER SPECIFIED TOLERANCES ON :

X = ±      X.X = ±      X.XX =

ANGLES = ±      HOLE DIA = ±

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- 01: SMA plug
- 02: SMA jack
- 03: SMA plug R/A
- 04: SMB plug
- 05: SMB jack
- 06: SMB plug R/A
- 07: MCX plug
- 08: MCX jack
- 09: MCX plug R/A
- 10: MMCX plug
- 11: MMCX jack
- 12: MMCX plug R/A
- 13: MMCX R/P
- 14: MMCX R/P R/A
- 15: FME plug
- 16: FME jack
- 17: GT5 plug
- 18: GT5 jack
- 19: MC-card plug
- 20: MC-card jack
- 21: MC-card plug R/A
- 22: BNC plug
- 23: BNC jack
- 24: SMC plug
- 25: SMC jack
- 99: I-PEX

**(7)Radome:**

- 0: without require
- 1: require

**(8)Label:**

- 0: without require
- 1: require

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(9) Nonskid pad:  
 0: without require  
 1: require

(10) Mounting ground plane :  
 0: no  
 1: yes

(11) Filter:  
 0: no filter  
 1: dielectric filter

## 2. Application:

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

## 3. Appearance:

Antenna Unit ( with radome , connector , and cable – refer to an attached drawing )  
 Dimensions 27.6\*28.2\*5.36mm  
 Weight 8±1 g (typ)

## 4. Operating Condition:

Temperature -40 to +90 °C  
 Humidity 10 to 95% RH

## 5. Storage Condition:

Temperature -40 to +90 °C  
 Humidity 10 to 95% RH

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## 6. 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 30x30 mm ground plane in an anechoic chamber.

### 6-1) Patch

Characteristics	Specification
Center Frequency	1575.42±1.023 MHz (when covered with a radome and measured by LNA ground plane)
Bandwidth (10dB return loss)	10 MHz min
Gain at Zenith	-1.5 dBic typ
Gain at 10° elevation	- 5.0 dBic min
Polarization	R.H.C.P
Axial Ratio	1.0 dB typ

### 6-2) Filter / LNA

Characteristics	Specification
Center Frequency	1575.42 ±1.023 MHz
Gain	18~27 dB (ps: 3v / 20dB)
Noise Figure	1.5 dB typ (ps: 3v / 1.5dB)
Filter(Out of band attenuation)	Dielectric filter 7dB min fo±20MHz 20dB min fo±50MHz 30dB min fo±100MHz ( fo=1575.42MHz )
Output V.S.W.R	2.0 max
Voltage	DC = 2.7~5.5V
Current	DC = 6~16mA (ps: 3v / 7mA)

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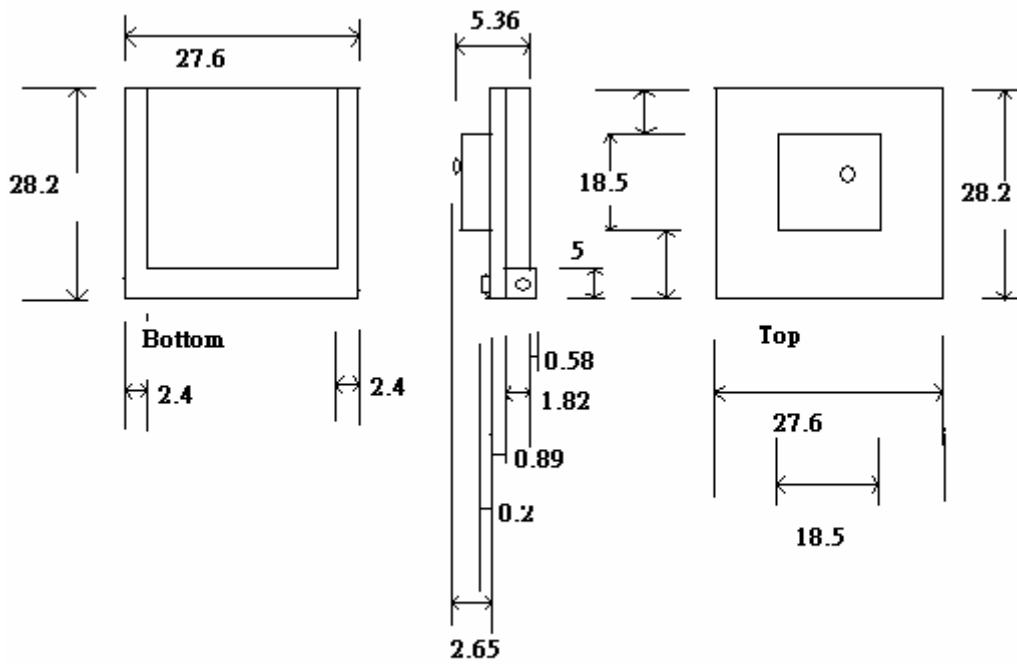
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## 7. Antenna Dimensions:



unit:mm

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