

GPS 10D Active Antenna

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

Features

1. High Gain and low noise.
2. Small type and no radome type are available.
3. Low Current Consumption.
4. Variable cable length and connectors are available.
5. Both magnetic mounting and screw mounting hole Built-in are available.
6. Various accessories (chip, ground plane, etc.)are available.
7. RoHS compliance

Applications

Automotive, recreational, marine, handheld system

Part Number

GPS 10D - D 3 00 - A
 (1) (2) - (3) (4) - (5) - (6)

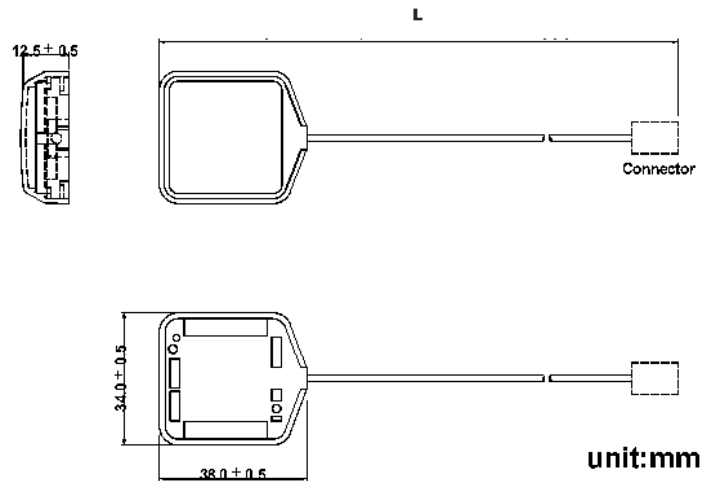
- (1) Product type : GPS
- (2) Radome
 B : radome #D
 N : without radome
- (3) Filter
 D : Dielectric
- (4) Voltage
 3 : $3.3\pm 0.6V$ 4 : $4.0\pm 1.0V$ 5 : $5.0\pm 1.0V$
- (5) Connector styles and Cable Length
 (Varies connector and cable length is available)

Connector styles	Cable Length
SMA Plug	2m, 3m, 5m
MCX Plug	2m, 3m, 5m
MCX Plug RA	2m, 3m, 5m
MMCX Plug	2m, 3m, 5m
MMCX Plug RA	2m, 3m, 5m
GT5-1S-HU	2m, 3m, 5m

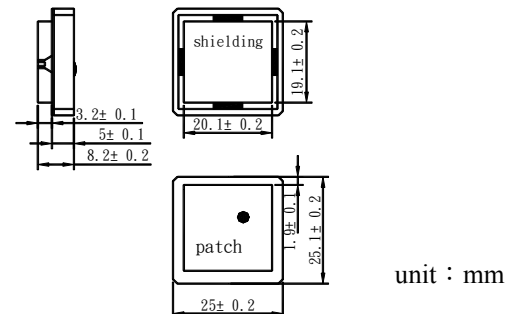
- (6) Suffix for special requirements

Dimensions

1. Antenna



2. LNA & Patch & Shielding



Specifications

1. Environmental

Item	10D
Operating Temperature	-40 to +90°C
Operating Humidity	10 to 95% RH
Storage Temperature	-40 to +90°C
Storage Humidity	10 to 95% RH

2. Electrical

- * All value are defined at $25\pm 15^\circ C$, $65\pm 20\%$ RH, power handling 1 u watt, air pressure 960 ± 100 HPA unless otherwise noted.
- * Patch characteristics are measured with 70x70 mm ground plane in an anechoic chamber.

(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	5.0 dBic typ
Gain at 10° elevation	- 1.0 dBic min
Polarization	R.H.C.P
Axial Ratio	1.0 dB typ

2. Filter/LNA

Characteristics	Specification
Center Frequency	1575.42 ±1.023 MHz
Gain	27 dB typ
Noise Figure	1.5 dB typ
Filter Out band attenuation	Dielectric **Saw 7dB min fo±20MHz 20dB min 30dB min fo±50MHz 30dB min 35dB min fo±100MHz (fo=1575.42MHz)
Output V.S.W.R	2.0 max
Voltage	5.0V DC =5 ±1.0V
	4.0V DC =4 ±1.0V
	3.3V DC =3.3 ±0.6V
Current	5.0 V 12mA TYP 15mA max
	4.0 V 15mA TYP 19mA max
	3.3 V 12mA TYP 15mA max