

#### **DATASHEET**

### **GPS Antenna ANTS157528S01001**



### **DESCRIPTION**

2.7~5V/28dB/RG174/1.8M/SMA(M) RoHS Compliant Product

### **KEY FEATURES**

WITH LOW NOISE AMPLIFIER

## Specifications | GENERAL

#### **ENVIRONMENTAL CONDITIONS**

Operation Temperature

| Storage Temperature      | -40°C to + 80°C |  |
|--------------------------|-----------------|--|
| LECTRICAL SPECIFICATIONS |                 |  |
| Operation Voltage        | Min: 2.7 V      |  |
|                          | Typ.: 3.0 V     |  |
|                          | Max: 5 OV       |  |

-40°C to + 80°C

Current Consumption Typ.: 10 mA Max: 15mA @ 3.0V

#### MECHANICAL SPECIFICATIONS

| Mounting                | Magnet mount. |
|-------------------------|---------------|
| Cable Pulling Off Force | 3Kg           |
| Water Proof             | IP67          |
| Housing Material        | ABS-758       |

Version: 1.0

Release date: 2023-09-06

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## Specifications | ANTENNA

| Frequency Range | 1575.42 ± 1.023 MHz.      |
|-----------------|---------------------------|
|                 | 1602±8 MHz                |
| Gain            | 1575.42MHz:-0.5 dBi Typ.  |
|                 | @zenith(28 mm x 28mm GND) |
|                 | 1602MHz:+2.5dBiTyp.       |
|                 | @zenith(28mm x 28mm GND)  |
| Polarization    | RHCP                      |

# Specifications | LNA

| Frequency Range  | 1575.42±1.023 MHz            |
|------------------|------------------------------|
|                  | 1602±8 MHz                   |
| Gain             | 28±3dB ( + 25 °C± 5°C)       |
| Noise Figure     | 1.5 dB Typ. ( + 25 °C ± 5°C) |
| Output Impedance | 50Ω                          |
| ESD              | 2.5KV(HBM)                   |

## TOTAL SPECIFICATIONS | Through Antenna, LNA, Cable and Connector

| RF Cable         | RG174 , $\psi$ 2.7 ± 0.2mm                    |
|------------------|---|
|                  | Cable Length: 1.8M ± 30mm                     |
| RF Connector     | SMA(M)  |
| Frequency Range  | 1575.42±1.023 MHz                             |
|                  | 1602±8 MHz                                    |
| Gain             | at Zenith :                                   |
|                  | 1575.42MHz: 27.5± 3dBic - (cable loss) Note:1 |
|                  | 1602MHz: 30.5± 3dBic - (cable loss) Note:1    |
| Output Impedance | 50Ω   |
| VSWR             | 2.0 Max                                       |
|                  |   |

Note 1: Cable Loss = Max.(-1.4dB/m)





### **OUTLINE**



