

# DATA SHEET

WIRELESS COMPONENTS

Active Antenna

ANT1818JB30B1575A

GPS

PIN 18x18x7.1 mm



## FEATURES

- High radiation efficiency
- Integrated LNA
- Flexible cable/connector option
- RoHS compliant

## APPLICATIONS

- Navigation device
- Telematics box
- Tracker

## ORDERING INFORMATION

All part numbers are identified by the series, packing type, material, size, antenna type, working frequency and packing quantity.

## PART NUMBER

**ANT 1818 J B30 B 1575A**

(1) (2) (3) (4) (5) (6)

### (1) PRODUCT

ANT = Antenna

### (2) SIZE

1818 = 18 × 18 mm

### (3) ANTENNA TYPE

J=Integrated Antenna

### (4) SERIAL NO.

B30

### (5) PACKING STYLE

B=Bag

### (6) WORKING FREQUENCY

1575 = 1.575 GHz

## PHYCOMP CTC

CAN4313324301581B

## I2NC

431332430158

**SPECIFICATION**

Ceramic Patch antenna

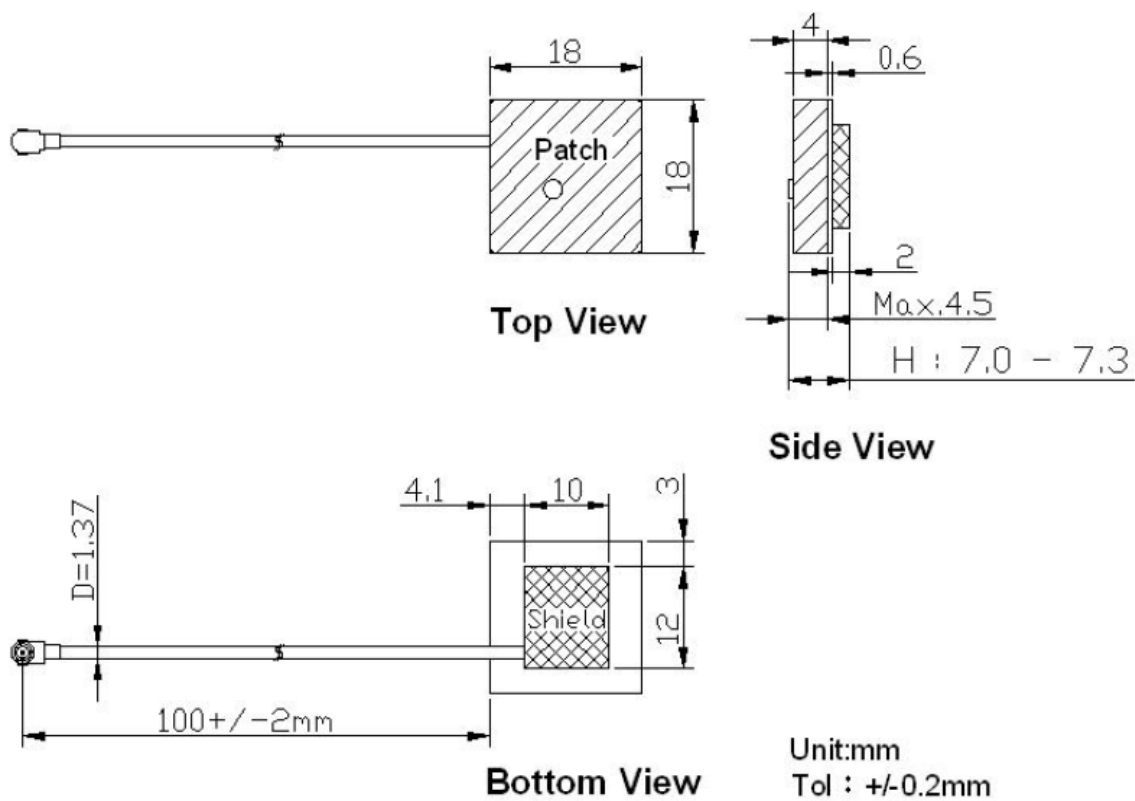
| DESCRIPTION      | VALUE                            |
|------------------|----------------------------------|
| Dimension        | 18×18×4 mm <sup>3</sup>          |
| Centre Frequency | 1575 ± 2MHz                      |
| Bandwidth        | 28.4 MHz (Typ.)                  |
| Gain             | -2.67 dBic (Typ.)                |
| VSWR             | 2.0 Max.                         |
| Polarization     | Right Hand Circular Polarization |
| Impedance        | 50Ω                              |
| Axis Ratio       | ≤ 4.5 dB                         |
| Beam Width       | > 120 Degrees                    |

LNA

| DESCRIPTION                          | VALUE                  |
|--------------------------------------|------------------------|
| Central Frequency                    | 1575 ± 1.023MHz        |
| Gain                                 | 25 dB (Typ.)           |
| Output VSWR                          | 2.0 Max.               |
| Noise Figure                         | 2.0 dB(Typ.)           |
| SAW Filter (Out of Band Attenuation) | 40dB min 0.15 ~ 960MHz |
|                                      | 20dB min 1475~1535MHz  |
|                                      | 32dB min 1627~1710MHz  |
|                                      | 32dB min 1750~1800MHz  |
|                                      | 28dB min 1850~1990MHz  |
| Supply Voltage                       | 3.0 ± 0.3V             |
| Current Consumption                  | 10 mA (Typ.)           |
| Output Impedance                     | 50Ω                    |
| Operating Temperature                | -30 ~ +85 °C           |
| Humidity                             | < 95%                  |
| Storage Temperature                  | -40 ~ +125 °C          |

**NOTE**

1. Based on 18×18 mm<sup>2</sup> ground plane (with customer's housing)
2. Centre frequency will be offset to working frequency while changes of customer's housing and ground plane.
3. Please contact local sales if you need customized design to gain optimum antenna performance.



|                |                                                     |
|----------------|-----------------------------------------------------|
| Length         | 18.0 $\pm$ 0.2 mm                                   |
| Width          | 18.0 $\pm$ 0.2 mm                                   |
| Thickness      | 7.0 ~ 7.3 mm                                        |
| Cable          | Diameter= 1.37 mm; Length= 100 mm $\pm$ 2 mm; Black |
| Connector      | I-PEX Connector 20351-112R-37                       |
| Shielding Case | 12 10 $\times$ 2 mm <sup>3</sup>                    |

**Fig. 1** Mechanical Data

# REVISION HISTORY

| REVISION | DATE | CHANGE NOTIFICATION | DESCRIPTION |
|----------|------|---------------------|-------------|
|----------|------|---------------------|-------------|

|           |               |   |                                                                 |
|-----------|---------------|---|-----------------------------------------------------------------|
| Version 0 | Feb. 19, 2013 | - | - New data sheet for Active antenna, PIN Feed size 18×18×7.1 mm |
|-----------|---------------|---|-----------------------------------------------------------------|

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Yageo:

[ANT1818JB30B1575A](#)