

# 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 I575A**  
 (1) (2) (3) (4) (5) (6)

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**(1) PRODUCT**

ANT = Antenna

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**(2) SIZE**

1818 = 18 × 18 mm

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**(3) ANTENNA TYPE**

J=Integrated Antenna

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**(4) SERIAL NO.**

B30

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**(5) PACKING STYLE**

B=Bag

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**(6) WORKING FREQUENCY**

I575 = 1.575 GHz

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**PHYCOMP CTC**

CAN4313324301581B

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**I2NC**

431332430158

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**SPECIFICATION**
**Ceramic Patch antenna**

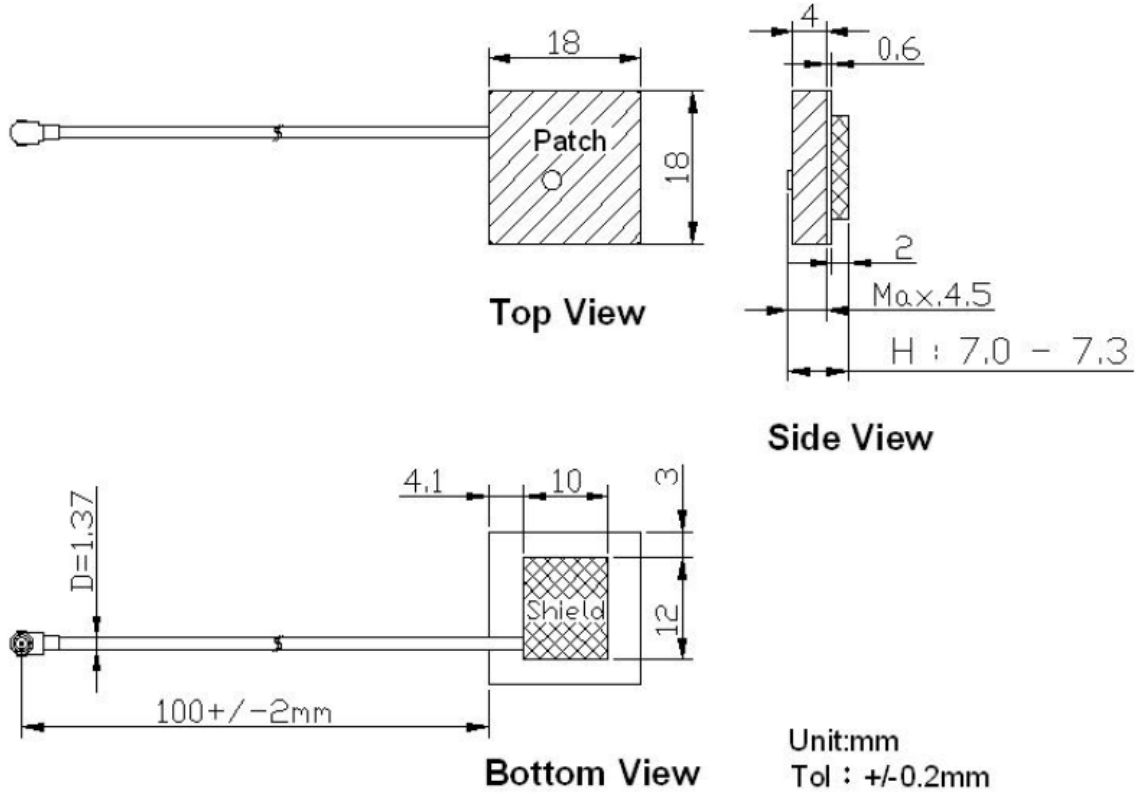
DESCRIPTION	VALUE
Dimension	18×18×4 mm <sup>3</sup>
Centre Frequency	1575 ± 2MHz
Bandwidth	28.4 MHz (Typ.)
Gain	-2.67 dBic (Typ.)
VSWR	2.0 Max..
Polarization	Right Hand Circular Polarization
Impedance	50Ω
Axis Ratio	≦ 4.5 dB
Beam Width	> 120 Degrees

**LNA**

DESCRIPTION	VALUE
Central Frequency	1575 ± 1.023MHz
Gain	25 dB (Typ.)
Output VSWR	2.0 Max.
Noise Figure	2.0 dB(Typ.)
	40dB min 0.15 ~ 960MHz
	20dB min 1475~1535MHz
SAW Filter (Out of Band Attenuation)	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 +/- 0.2 mm
Width	18.0 +/- 0.2 mm
Thickness	7.0 ~ 7.3 mm
Cable	Diameter= 1.37 mm; Length= 100 mm +/- 2 mm; Black
Connector	I-PEX Connector 20351-112R-37
Shielding Case	12 10 x 2 mm <sup>3</sup>

**Fig. 1** Mechanical Data

REVISION HISTORYREVISION   DATE      CHANGE NOTIFICATION   DESCRIPTION

<u>REVISION</u>	<u>DATE</u>	<u>CHANGE NOTIFICATION</u>	<u>DESCRIPTION</u>
Version 0	Feb. 19, 2013	-	- New data sheet for Active antenna, PIN Feed size 18×18×7.1 mm