

# DATA SHEET

## WIRELESS COMPONENTS

Active Antenna

ANT1212JB27B1575A

GPS

PIN 12 × 12 × 6.5 mm



FEATURES

- Compact size
- 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 I212 J B27 B I575A**  
 (1) (2) (3) (4) (5) (6)

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**(1) PRODUCT**

ANT = Antenna

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**(2) SIZE**

I212 = 12 × 12 mm

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**(3) ANTENNA TYPE**

J = Integrated Antenna

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**(4) SERIAL NO.**

B27

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**(5) PACKING STYLE**

B = Plastic Bag

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**(6) WORKING FREQUENCY**

I575 = 1.575 GHz

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**PHYCOMP CTC**

CAN4313322271581B

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**I2NC**

431332227158

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**SPECIFICATION**

Ceramic Patch antenna

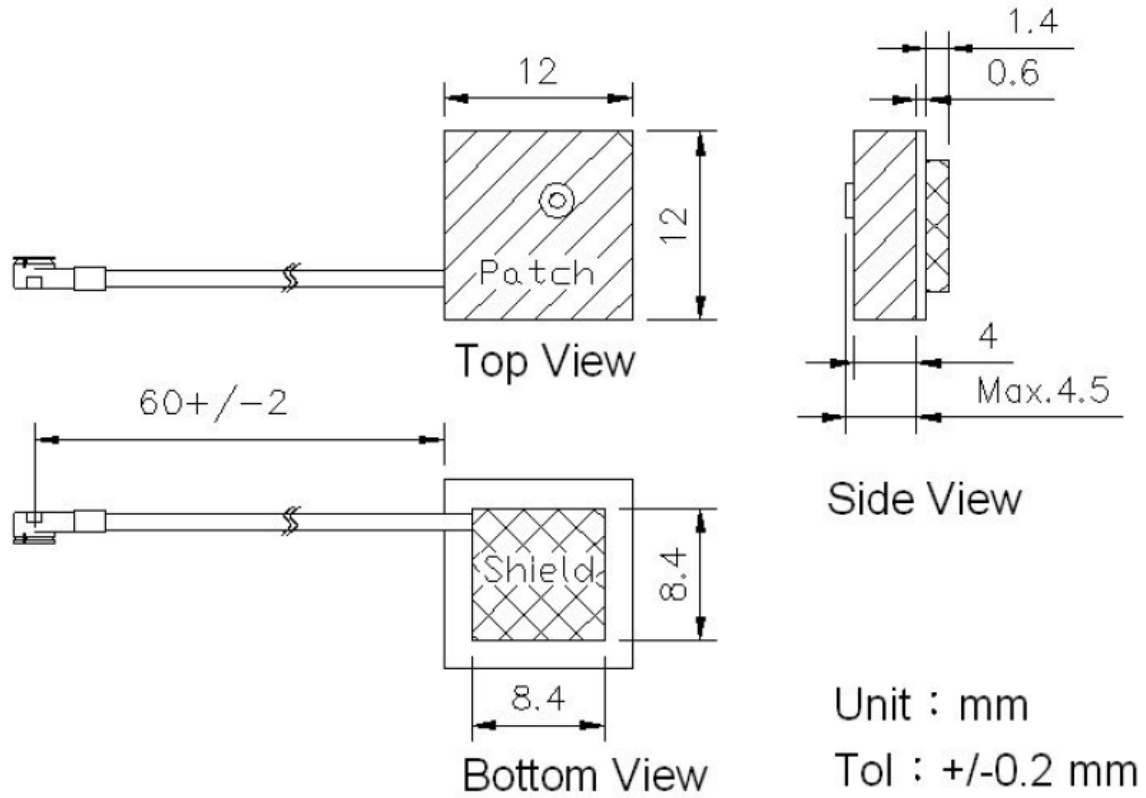
DESCRIPTION	VALUE
Dimension	12×12×4 mm <sup>3</sup>
Centre Frequency	1575 ± 2MHz
Bandwidth	12 MHz (Typ.)
Gain	-4.56 dBic (Typ.)
VSWR	1.5 Max.
Polarization	Right Hand Circular Polarization
Impedance	50Ω

LNA

DESCRIPTION	VALUE
Central Frequency	1575 ± 1.023MHz
Gain	25 dB (Typ.)
Output VSWR	1.5 Max.
Noise Figure	1.0 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	12 mA (Max.)
Output Impedance	50Ω
Operating Temperature	-30 ~ +85 °C
Humidity	< 95%
Storage Temperature	-40 ~ +125 °C

**NOTE**

1. Based on 12×12 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	12 +/- 0.2 mm
Width	12 +/- 0.2 mm
Thickness	6.5 ~ 6.8 mm
Cable	Diameter = 1.13 mm ; Length = 60 mm ; Black
Connector	I-PEX or HRS
Shielding Case	8.4 x 8.4 x 1.4 mm <sup>3</sup>

Fig. 1 Mechanical Data

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Feb 22, 2013	-	- New data sheet for Active antenna, PIN Feed size 12×12×6.5 mm