

**Description**: 50x50x15 GNSS+L2L5 Active Antenna

### PART NUMBER: ANT4050JB01BGN25A

## **Features:**

- Size: 50x50x15 mm<sup>3</sup>
- High radiation efficiency
- Low noise figure
- · RoHS compliant

# **Applications:**

- Navigation device
- Telematics box
- Fleet management

## **SPECIFICATIONS**

### **Ceramic Patch Antenna**

DESCRIPTION	VALUE
Dimension	50×50×12 mm
Centre Frequency	L2 Band ÷ 1227.6 MH
	L5 Band:1176.45 MH
	BD:1561 MH
	GPS:1575.42 MH
	GLONASS:1602 MH
Peak Gain	L2 Band: 0.57 dBi
	L5 Band: 3.00 dBi
	BD: 2.96 dBi
	GPS: 3.69 dBi
	GLONASS ÷ 1.71 dBi
Axis Ratio	L2 Band ≦ 5.0 d
	L5 Band $\leq$ 5.0 dl
	$BD \leq 3.0  dl$
	$GPS \leq 3.0 \; dI$
	$GLONASS \leq 3.0 dI$
VSWR	3.0 Max
Polarization Right Hand Circular Polarizat	

In the effort to improve our products, we reserve the right to make changes judged to be necessary.



This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden. For more information:

Pulse Worldwide Headquarters 15255 Innovation Drive #100 San Diego, CA 92128 USA Tel:1-858-674-8100 Pulse/Larsen Antennas 18110 SE 34<sup>th</sup> St Bldg 2 Suite 250 Vancouver, WA 98683 USA Tel: 1-360-944-7551 Europe Headquarters Pulse GmbH & Do, KG Zeppelinstrasse 15 Herrenberg, Germany Tel: 49 7032 7806 0 Pulse (Suzhou) Wireless Products Co, Inc. 99 Huo Ju Road(#29 Bldg,4<sup>th</sup> Phase Suzhou New District Jiangsu Province, Suzhou 215009 PR China Tel: 86 512 6807 9998





# **Description**: 50x50x15 GNSS+L2L5 Active Antenna

### PART NUMBER: ANT4050JB01BGN25A

## **SPECIFICATIONS**

LNA	DESCRIPTION		VALUE
i			L2 Band : 1227.6 MHz
			L5 Band : 1176.45 MHz
	Centre Frequency		BD : 1561 MHz
			GPS: 1575.42 MHz
			GLONASS: 1602 MHz
	Gain		L2 Band $: 38 \pm 3 dB$
			L5 Band $:$ 38 $\pm$ 3 dB
			BD : 38 ± 3 dB
			GPS : 38 ± 3 dB
			GLONASS : 38 ± 3 dB
			40dB min 1.0 ~ 960 MHz
	SAW Filter (Out of Band Attenuation)		25dB min 1427~1463 MHz
		BD / GPS / GLONASS :	25dB min 1710~1785 MHz 25dB min 1850~1980 MHz
			40dB min 2401~2483 MHz
			15dB min 925 ~ 960 MHz
	SAW Filter (Out of Band Attenuation)		15dB min 1427~1463 MHz
		L2 / L5:	20dB min 1626~1660 MHz
			20dB min 1695~1785 MHz
			40dB min 1850~2025 MHz
	Output VSWR		2.0 (Max.)
	Noise Figure		< 1.5 dB
	Supply Voltage		3.0 ~ 3.6 V
	Current Consumption		15 mA (Max.)
	Output Impedance		50Ω
	Operating Temperature		-30 ~ +85 °C
	Humidity		< 95%
	Storage Temperature		-40 ~ +90 °C

#### NOTE

1. Based on 50×50 mm<sup>2</sup> ground plane (free space)

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.

In the effort to improve our products, we reserve the right to make changes judged to be necessary. CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.



R<sub>0</sub>HS

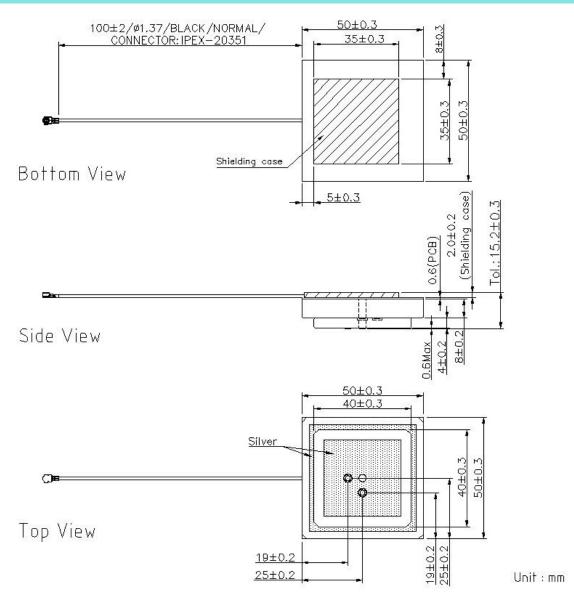
3



# **Description**: 50x50x15 GNSS+L2L5 Active Antenna

### PART NUMBER: ANT4050JB01BGN25A

## **MECHANICAL DRAWING**



Length	50.0 ± 0.3 mm	
Width	50.0 ± 0.3 mm	
Thickness	15.2 ± 0.3 mm	
Cable	Diameter = 1.37 mm ; Length = 100 mm ± 2 mm ; Black	
Connector	I-PEX Connector 20351	

In the effort to improve our products, we reserve the right to make changes judged to be necessary. CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.



TECHNICAL DATA SHEET

# **Description**: 50x50x15 GNSS+L2L5 Active Antenna

## PART NUMBER: ANT4050JB01BGN25A

## **REVISION HISTORY**

Revision	Date	Description
Version 1	Feb. 9, 2021	- New issue for Pulse version

In the effort to improve our products, we reserve the right to make changes judged to be necessary. CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

