



APPLICATION SPECIFICATION

868, 915 MHZ ISM STANDALONE ANTENNA

1. Scope

1.1. This specification describes the antenna application. The information in this document is for reference and benchmark purposes only. The user is responsible for validating antenna RF performance based on the user's actual implementation.

2. Product Description

2.1. Product Name and Series Number

- 2.1.1. Product name: 868/915MHz ISM Standalone Antenna 105262-****
- 2.1.2. Sub number for 100 mm cable is 0001.
- 2.1.3. Sub number for 150 mm cable is 0002.
- 2.1.4. Sub number for 200 mm cable is 0003.

2.2. Design and Construction

- 2.2.1. Antenna shall be of the design, construction and physical dimensions specified on the
- 2.2.2. Applicable sales drawing.

2.3. Materials

- 2.3.1. Flex: Refer to respective Molex sales or engineering drawings
- 2.3.2. Plating: Refer to respective Molex sales or engineering drawings
- 2.3.3. Cable Line: Refer to respective Molex sales or engineering drawings
- 2.3.4. Connector: Refer to respective Molex sales or engineering drawings

3. Applicable Documents and Specification

3.1. See drawings for the relevant reference documents. In the case where the specification differs from the drawings, the drawings take precedence.

4. Ratings

- 4.1. Impedance: 50ohm
- 4.2. RF Power : 2 Watt Max
- 4.3. Temperature Range
 - 4.3.1. Operating: - 30° C to + 75° C
 - 4.3.2. Storage: - 30° C to + 75° C
- 4.4. Humidity
 - 4.4.1. Storage: +15~70% RH
 - 4.4.2. Test: +80~95% RH

5. Specification

5.1. Please refer to the specification PS-1015262-001

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DOCUMENT NUMBER: AS-105262-0001	CREATED / REVISED BY: Ryan Liu	CHECKED BY: Ethan Zhong	APPROVED BY: Welson Tan

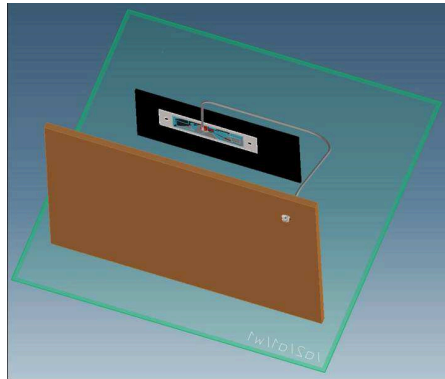


APPLICATION SPECIFICATION

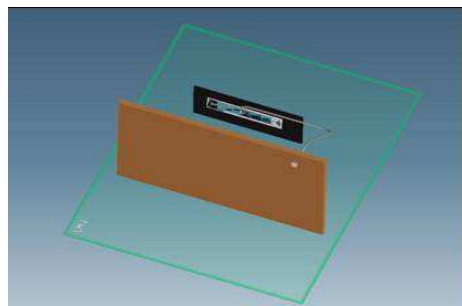
6. Application Instructions

6.1. Assembly Instructions

- 6.1.1. The device radio must be 50ohm matched.
- 6.1.2. The insertion loss from the power amplifier to the connector on the PCB board must be low or else any loss will affect the overall antenna efficiency.
- 6.1.3. Although this antenna is balance feed structure and facilitates low ground plane dependence, the distance from the antenna to the PCB will still affect the antenna radiation pattern and reduce the efficiency. It is recommended to paste the flex portion of the antenna at least 5mm away from the system board.
- 6.1.4. Mounting the antenna flex perpendicular to the system board will give the best radiation pattern.
- 6.1.5. Choose the approximate length of the cable for your solution as the longer the cable, the higher is the insertion loss.
- 6.1.6. During assembly, if the cable is being assembly closed to the flex of the antenna, it will affect the antenna radiation and the efficiency will be degraded.



Recommended assembly method



Cable close to antenna to flex of antenna

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6.2. Assembly Methods

- 6.2.1. The 105262 series of standalone antennas are very easy to use.
- 6.2.2. Simply peel off the poly-flexible adhesive tape on the underside of antenna and stick it on any desired location within the device casing.
- 6.2.3. Next, mount the UFL-type coaxial connector at the end of the micro-coaxial cable to the device radio and the antenna is ready to use.
- 6.2.4. For added convenience and design flexibility, the micro-coaxial cables come in lengths of 100, 150 and 200mm.

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