

Antenna Cable

YM0003AB Datasheet

Antenna Services

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About the Document

Revision History

| Version | Date | Author | Note |
|---------|------------|-----------|---|
| - | 2020-09-03 | Kenny YIN | Creation of the document |
| 1.0 | 2020-09-03 | Kenny YIN | First official release |
| 1.1 | 2021-12-03 | Kenny YIN | Updated the product description in Chapter 1. |

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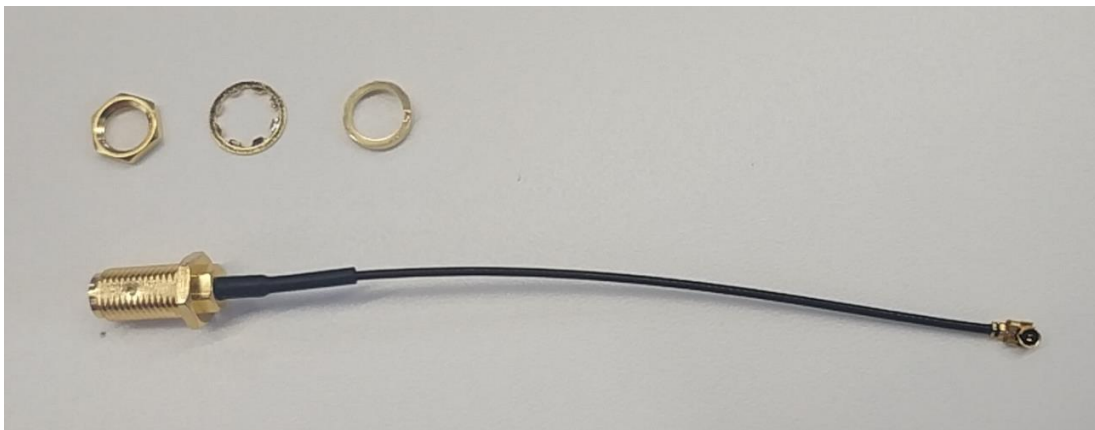
1 Product Description

To meet the requirements of devices for RF connection among antennas, modules, and motherboards, as well as long-distance wiring, Quectel provides customers with a wide range of RF cable products. These cables use high-quality materials and connectors to reduce the loss to the greatest extent, ensuring overall RF performance. Quectel also provides customized services according to customers' particular requirements for cable material, cable length, and connector type.

We provide comprehensive antenna design support such as simulation, testing and manufacturing for custom antenna solutions to meet your specific application needs.

2 Product Feature

- Low loss



3 Product Specifications

3.1. Cable Construction

| Item | Material | Diameter (mm) |
|-----------|---------------------------|---------------|
| Conductor | Silver plated copper wire | 0.24 |
| Insulator | FEP | 0.7 |
| Shield | Tinned copper wire | 0.92 |
| Jacket | PVC | 1.13 |

3.2. Electrical Properties and Mechanical Properties

| Item | Value |
|-------------------------|--------------------------------|
| Impedance | 50 \pm 2 Ω |
| Operating Frequency | 0–6000 MHz |
| Return Loss | \geq 20 dB |
| Insertion Loss | 500 MHz: -0.35 dB |
| | 1000 MHz: -0.59 dB |
| | 1500 MHz: -0.7 dB |
| | 2000 MHz: -0.82 dB |
| | 2500 MHz: -0.95 dB |
| | 3000 MHz: -1.07 dB |
| | 3500 MHz: -1.18 dB |
| | 4000 MHz: -1.3 dB |
| | 4500 MHz: -1.41 dB |
| | 5000 MHz: -1.53 dB |
| Screening Effectiveness | 500 MHz – 1 GHz: \geq -50 dB |
| | 1–3 GHz: \geq -60 dB |
| | 3–6 GHz: \geq -65 dB |

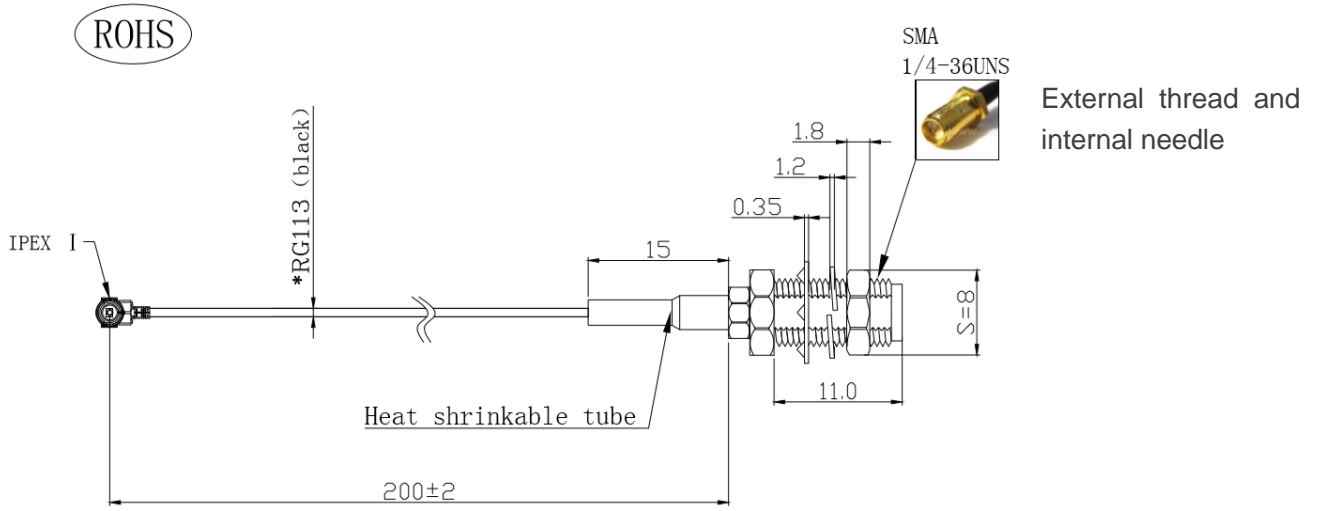
4 Overall Performance

4.1. Test Environment

- Cable/Harness Tester: WB-500, 100 kHz – 6.0 GHz



5 Product Size



Unit: mm