

Antenna Cable

YSAO001AA Datasheet

Antenna Services

Version: 1.2

Date: 2022-05-30

Status: Released



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About the Document

Revision History

Version	Date	Author	Note
-	2021-8-02	Aria CHU	Creation of the document
1.0	2021-08-02	Aria CHU	First official release
1.1	2021-10-11	Kenny YIN	Updated the drawing (Chapter 5).
1.2	2022-05-30	Riona HAN	Updated the data (Chapters 2 and 3.2).

Contents

About the Document	3
Contents.....	4
1 Product Description	5
2 Product Features.....	5
3 Product Specifications	6
3.1. Cable Construction.....	6
3.2. Electrical Properties and Mechanical Properties	6
4 Overall Performance	7
4.1. Test Environment.....	7
4.2. S21	8
5 Product Size	9

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.

2 Product Features

- 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	DC–6000 MHz
Cable Type & Length	Φ 1.13 Black & 100mm
Weight	-
Operation temperature	-40 °C to +85 °C
Connector	FAKRA-D(Purple) to U.FL 1
Return Loss	\geq 20 dB
Insertion Loss	698 MHz: -0.44 dB
	960 MHz: -0.55 dB
	1710 MHz: -0.69 dB
	2690 MHz: -0.85 dB
	3300 MHz: -2.27 dB
	3800 MHz: -1.65 dB
	4400 MHz: -1.57 dB
	5000 MHz: -1.43 dB
5800 MHz: -1.43 dB	
Screening Effectiveness	500 MHz – 1 GHz: \geq -50 dB
	1–3 GHz: \geq -60 dB
	3–6 GHz: \geq -65 dB

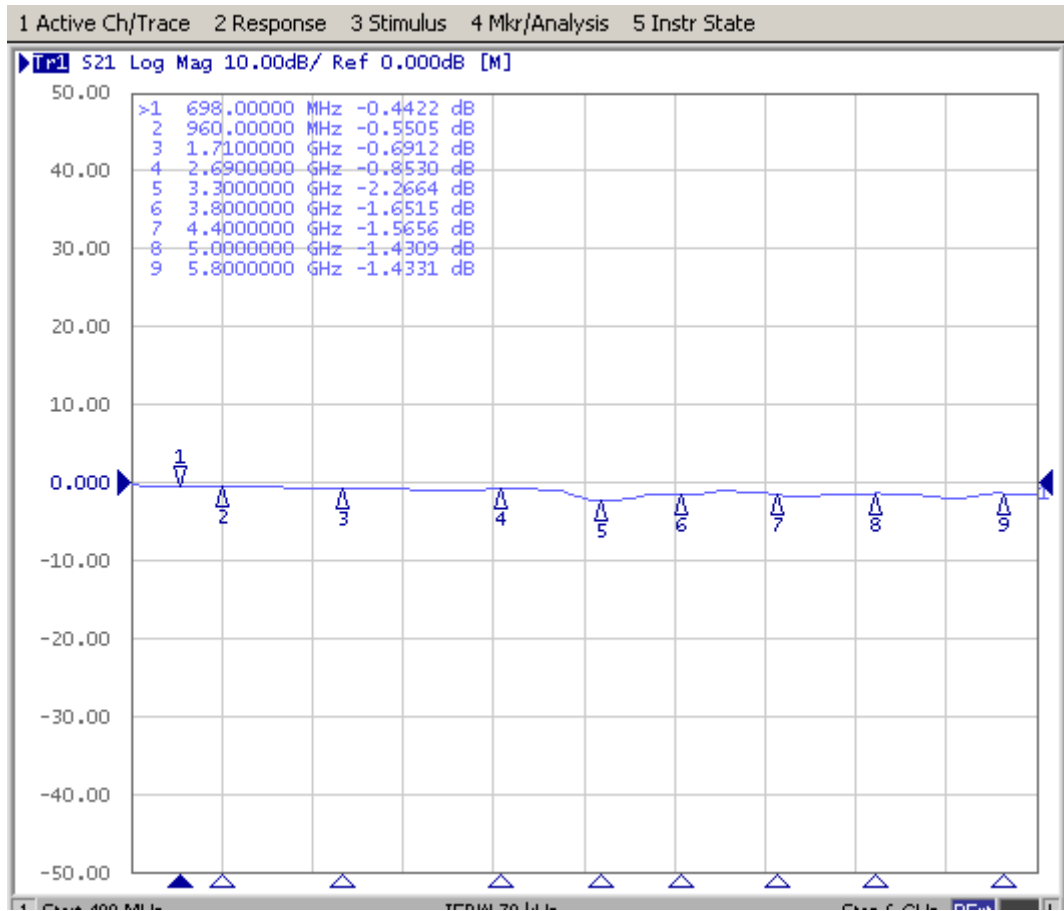
4 Overall Performance

4.1. Test Environment

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



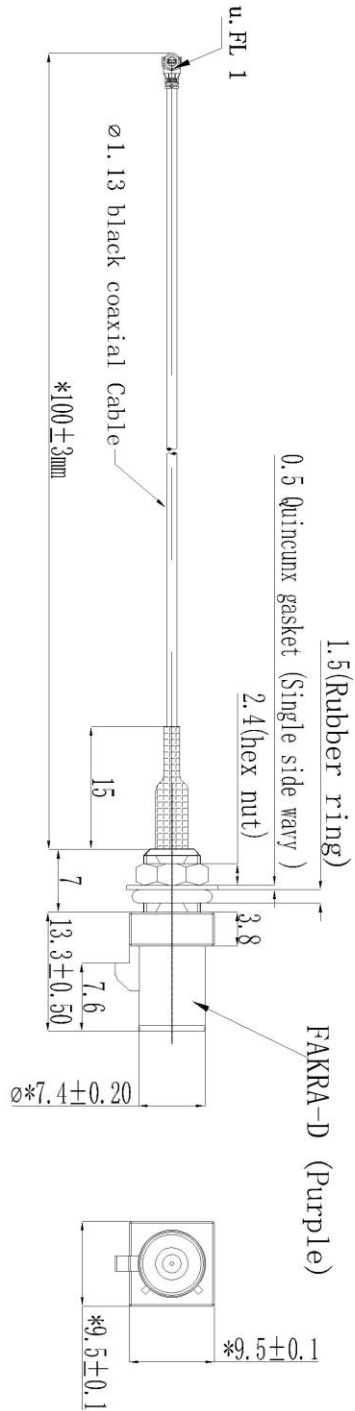
4.2. S21



Frequency (MHz)	698	960	1710	2690	3300	3800	4400	5000	5800
S21	-0.44	-0.55	-0.69	-0.85	-2.27	-1.65	-1.57	-1.43	-1.43

5 Product Size

RoHS



Unit: mm