antenova®

DATASHEET

CASEND247-50 • CABLE ASSEMBLY

Description

- Semi-rigid cable with SMA (F) Jack Straight Connector
- 50mm and 100mm 2.2mm diameter semi-rigid cable
- Unterminated end, trimmed and tinned

Contents

1. Features

Semi-rigid cable has low attenuation loss

Semi-rigid cable used for making accurate RF measurements

Low Insertion loss SMA connector

50mm and 100mm available

2. General data

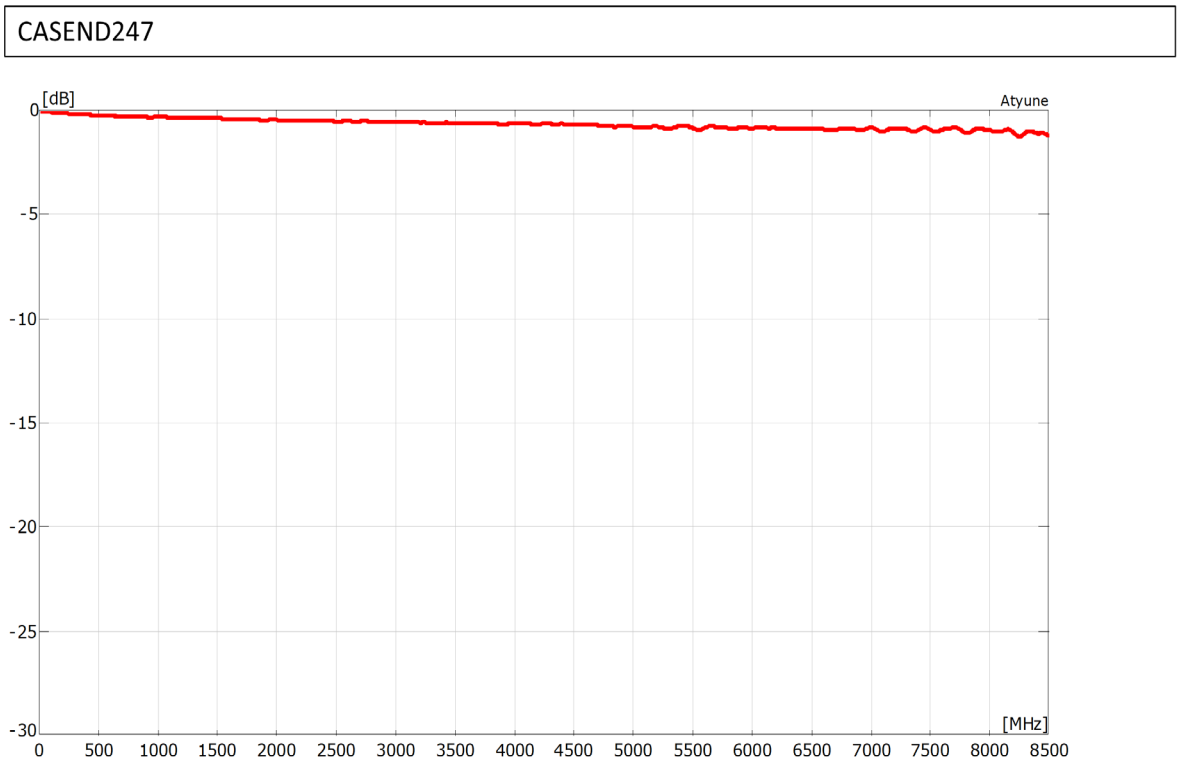
2.1. SMA Jack Straight Connector

ELECTRICAL	
Impedance	50Ω
Frequency Range	DC ~ 6GHz
Working Voltage	Max≦335Vrms
Dielectric Withstanding Voltage	1000 Vrms
Insulation Resistance	≧5000MΩ
Center Contact Resistance	≦3mΩ
Outer Contact Resistance	≦2mΩ
VSWR	≦1.25
Durability	＞500 cycles
Temperature range	-45ºc to +155ºc

2.2. Cable Specification

ELECTRICAL CHARACTERISTICS	
Cable Item	Semi-Rigid Cable
Capacitance (pF/m)	95.1
Impedance (ohm)	50
Velocity (%)	70
Corona Extinction Voltage (VRMS @60Hz)	1500
Voltage Withstanding (VRMS @60Hz)	5000
Min. Bend Radius (mm)	7.63
Moding Frequency (MHz)	61
Operating Temperature	-55°C to +125°C
VSWR	≦ 1.50
Attenuation (dB/100m) **Average Power @20°C and sea level**	500MHz – 45dB/100m (190.3 Watts) 1000MHz – 64dB/100m (133.2 Watts) 5GHz – 151dB/100m (57.2 Watts) 10GHz – 222dB/100m (39.3 Watts) 20GHz – 329dB/100m (26.7 Watts)
Cable length	50mm/100mm Unterminated end, trimmed and tinned

3. Cable Insertion Loss



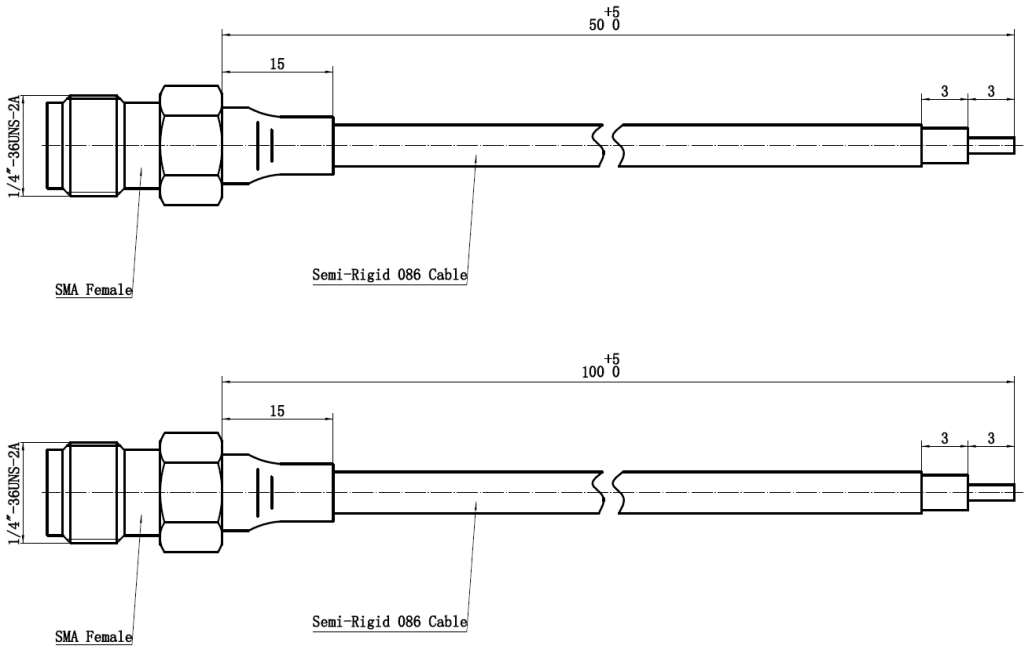
4. Part number

Part Number – CASEND247-50

Part Number – CASEND247-100

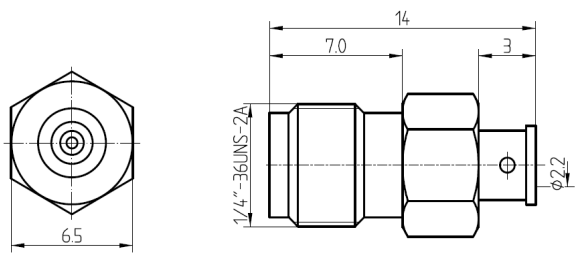
5. Drawing

5.1. Cable assembly

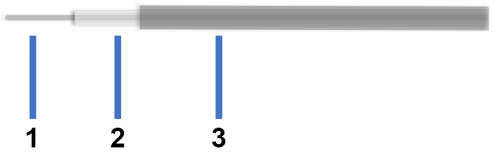


5.2. Connectors

connector : SMA Jack Straight



5.3. Cable Construction Specification



		MATERIAL	DIAMETER (mm)
1	Inner Conductor	Silver Plated Copper	0.51
2	Dielectric	PTFE	1.68
3	Outer Conductor	Tin Plated Copper Tube	2.20

5.4. Bill of Material

		MATERIAL	FINISH	QTY
1	SMA Jack connector	Brass	Gold	1
2	Semi-Rigid Cable	Tin Plated Copper Tube	Silver	1
3	Heat Shrink Tube	PE	Black	1

6. Hazardous Material Regulation Conformance

The connector has been tested to conform to RoHS requirements.

A certification of conformance is available from Antenova's website.

Quality statements

Antenova's products conform to REACH and RoHS legislation. For our statements regarding these and other quality standards, please see antenova.com.

Datasheet version

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Antenna design, integration and test resources

Product designers – the details contained in this datasheet will help you to complete your embedded antenna design. Please follow our technical advice carefully to obtain optimum antenna performance.

We aim to support our customers to create high performance wireless products. You will find a wealth of design resources, calculators and case studies to aid your design on our website.

Antenova's design laboratories are equipped with the latest antenna design tools and test chambers. We provide antenna design, test and technical integration services to help you complete your design and obtain the required certifications.

If you cannot find the antenna you require in our product range, please contact us to discuss creating a custom antenna to meet your exact requirements.

Share knowledge with RF experts around the world.

ask.antenova is a global forum for designers and engineers working with wireless technology.

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