



## Description

- SMA (F) Jack Bulkhead Straight Connector to MMCX (M) Plug Right Angle Connector
- 100mm RG174 cable

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## 1. Features

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High reliability connectors  
Low loss cable  
Low insertion loss RF connectors

## 2. General data

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### 2.1. SMA (F) Jack Bulkhead Straight Connector

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ELECTRICAL	
Impedance	50 $\Omega$
Frequency Range	DC ~ 6GHz
Working Voltage	Max $\leq$ 335Vrms
Dielectric Withstanding Voltage	1000 Vrms
Insulation Resistance	$\geq$ 1000M $\Omega$
Center Contact Resistance	$\leq$ 10m $\Omega$
Outer Contact Resistance	$\leq$ 5m $\Omega$
VSWR	$\leq$ 1.20 @3GHz
Durability	>500 cycles
Temperature range	-55 $^{\circ}$ c to +155 $^{\circ}$ c

## 2.2. MMCX (M) Plug Right Angle Connector

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ELECTRICAL	
Impedance	50Ω
Frequency Range	DC ~ 6GHz
Working Voltage	Max $\leq$ 335 Vrms
Dielectric Withstanding Voltage	500 Vrms
Insulation Resistance	$\geq$ 1000 MΩ
Center Contact Resistance	$\leq$ 10mΩ
Outer Contact Resistance	$\leq$ 5mΩ
VSWR	$\leq$ 1.25
Durability	500 cycles
Operating Temperature	-40°C to +90°C

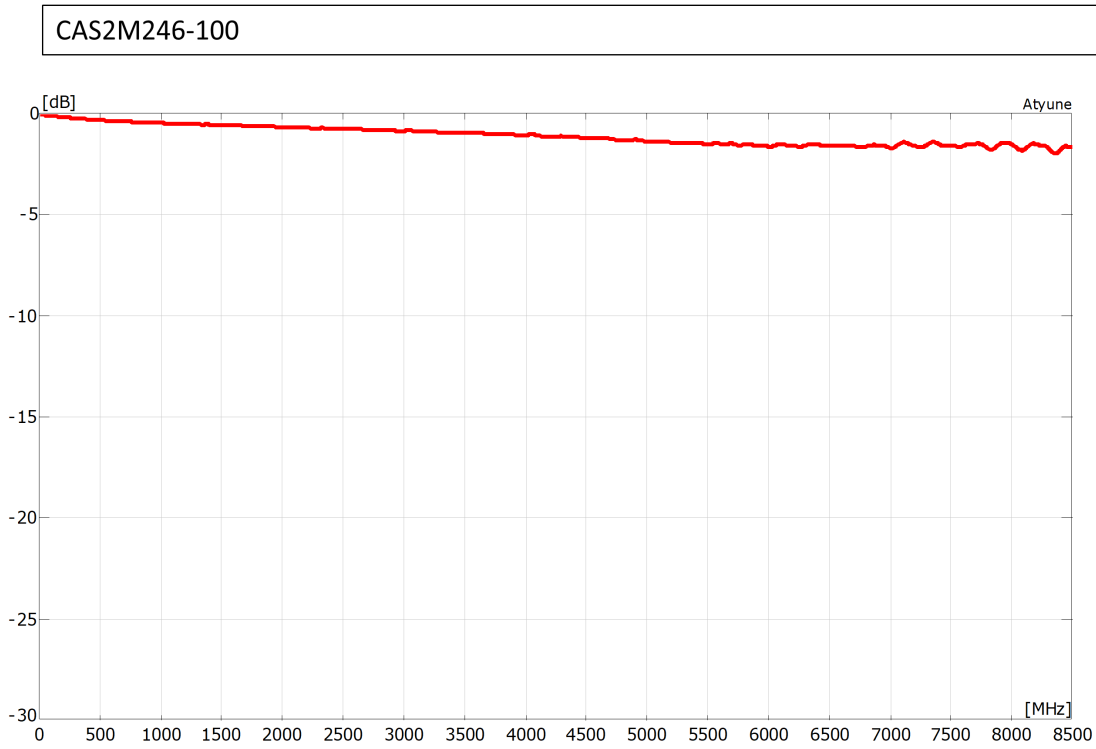
### 2.3. Cable Specification

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ELECTRICAL CHARACTERISTICS	
Cable Item	RG174
Capacitance (pF/m)	101.05
Impedance (ohm)	50
Velocity (%)	66
Min. Bend Radius (mm)	10
Max. Oper. Voltage (VMS)	1500
Max. Oper. Frequency (MHz)	1000
Operating Temperature	-20°C to +80°C
VSWR	$\leq 1.20$
Attenuation (dB/100m)	100 MHz - 27.6dB/100m 400 MHz - 55.8dB/100m 1000 MHz - 89.9dB/100m
Cable length	100mm

### 3. Cable Insertion Loss

Figure 3

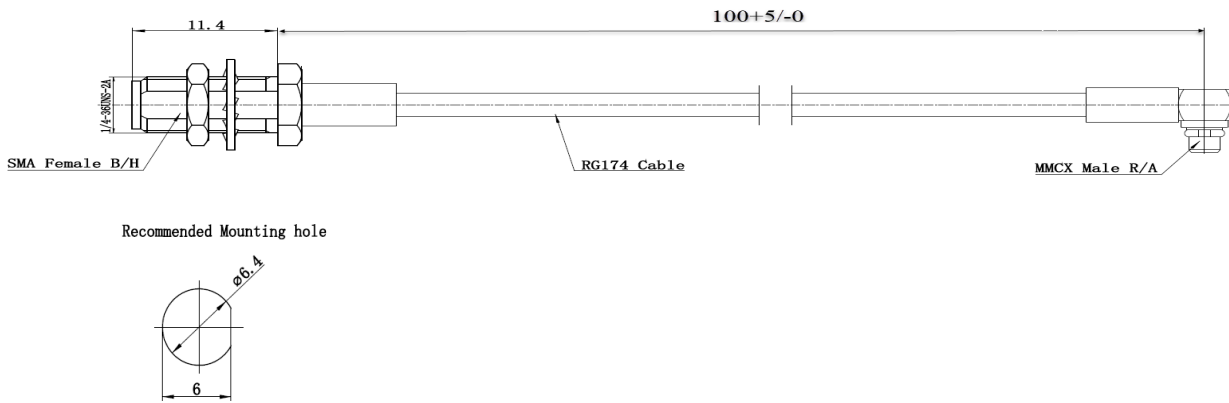


## 4. Part number

Part Number – CAS2M246-100

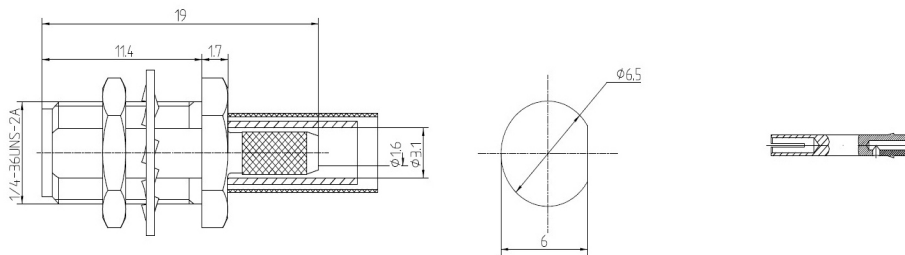
## 5. Drawing

### 5.1. Cable assembly

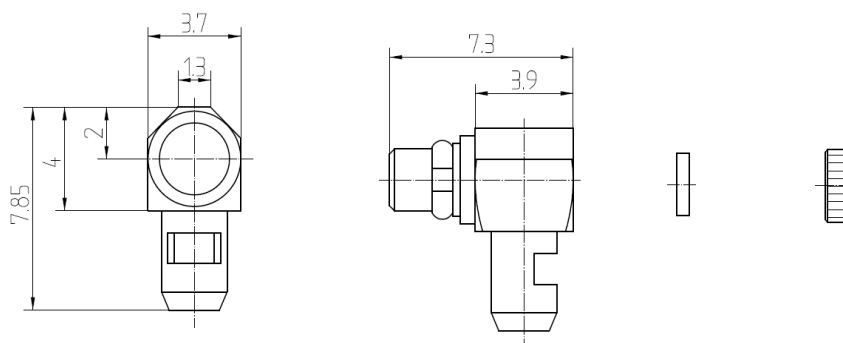


### 5.2. Connectors

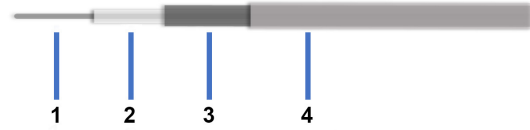
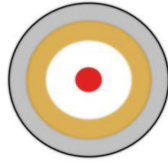
connector 1: SMA Jack B/H Straight



connector 2: MMCX Plug Right Angle



### 5.3. Cable Construction Specification



Cable Cross Section

		MATERIAL	DIAMETER (MM)
1	Inner Conductor	Bare Copper	7 x 0.16
2	Dielectric	Solid PE	1.52
3	Outer Conductor	Tinned Copper Braid	2.05
4	Jacket	PVC	2.60

### 5.4. Bill of Material

		MATERIAL	FINISH	QTY
1	SMA Jack Bulkhead connector	Brass	Gold	1
2	MMCX(M) R/A	Brass	Gold	1
3	RG174 Cable	PVC Jacket	Black	1
4	Heat Shrink Tube	PE	Black	2
5	Washer	Brass	Gold	1
6	Nut	Brass	Gold	1

## 6. Hazardous Material Regulation Conformance

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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](http://antenova.com).



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Datasheet version

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