



# SMA Female to SMA Female Using Flexible RG316 Coax Cable

## RF Cable Assemblies Technical Data Sheet

MTCA00039

# Configuration

Connector 1: SMA FemaleConnector 2: SMA FemaleCable Type: RG316

#### **Features**

- Max Frequency 3 GHz
- 69% Phase Velocity
- FEP Jacket
- 100 Mating Cycles

# **Applications**

General Purpose

Laboratory Use

#### Description

MilesTek's MTCA00039 coaxial cable assembly is a SMA female to SMA female using flexible RG316 coax cable. MilesTek cables are built using high quality materials and are tested to insure these assemblies meet all performance specifications. Coaxial cable assemblies are stocked in standard lengths and will ship same day. Custom lengths of this cable assembly are also available upon request. These assemblies are part of MilesTek's extensive portfolio of products that are in stock and ship same day.

## **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		69		%
Operating Voltage (AC)			250	Vrms
Dielectric Withstanding Voltage (AC)			750	Vrms
Jacket Spark			2,000	Vrms

#### **Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.05	0.1	0.4	1	3	GHz
Insertion Loss (Typ.)	0.075	0.11	0.21	0.38	0.58	dB/ft
	0.25	0.36	0.69	1.25	1.9	dB/m

**Electrical Specification Notes:** 

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SMA Female to SMA Female Using Flexible RG316 Coax Cable MTCA00039



# 100

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# **Mechanical Specifications**

**Cable Assembly** 

Diameter 0.312 in [7.92 mm]

Cable

Cable TypeRG316Impedance50 OhmsInner Conductor TypeStranded

Inner Conductor Material and Plating Copper Clad Steel, Silver

Dielectric Type PTFE
Number of Shields 1

Shield Layer 1 Silver Plated Copper Braid

Jacket Material FEP, Tan

Jacket Diameter 0.102 in [2.59 mm]

#### **Connectors**

		Connector 2	
Description	Connector 1		
Туре	SMA Female	SMA Female	
Specification	MIL-STD-348	MIL-STD-348	
Impedance	50 Ohms	50 Ohms	
Mating Cycles	100	100	
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold	
Dielectric Type	PTFE	PTFE	
Outer Conductor Material and Plating	Brass, Nickel	Brass, Nickel	
Body Material and Plating	Brass, Nickel	Brass, Nickel	

# **Environmental Specifications**

**Temperature** 

Operating Range -55 to +165 deg C

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:

Values at 25°C, sea level.

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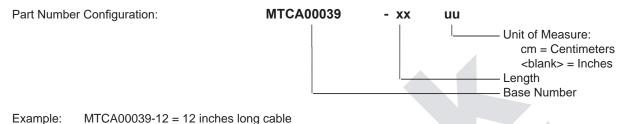


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#### **How to Order**



MTCA00039-100cm = 100 cm long cable

Our offering, used primarily in military, R&D and production applications, consists of a comprehensive line of MIL-STD-1553B data bus couplers, harnesses and cable assemblies, connectors and connector termination systems. MilesTek also offers expertise in manufacturing custom cable assemblies and harnesses.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SMA Female to SMA Female Using Flexible RG316 Coax Cable MTCA00039

URL: https://www.milestek.com/SMA-Female-SMA-Female-MTRG316U-MTCA00039-p.aspx

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. MilesTek reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. MilesTek does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and MilesTek does not assume any liability arising out of the use of any part or documentation.

