



SMB Plug Right Angle to SMB Plug Using Flexible RG174 Coax Cable

RF Cable Assemblies Technical Data Sheet

MTCA00121

Configuration

- Connector 1: SMB Plug
- Connector 2: SMB Plug Right Angle
- Cable Type: RG174

Features

- Max Frequency 1 GHz
- 66% Phase Velocity
- PVC Jacket

Applications

- General Purpose
- Laboratory Use

Description

MilesTek's MTCA00121 coaxial cable assembly is a SMB plug right angle to SMB plug using flexible RG174 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		1,000	MHz
VSWR			1.4:1	
Velocity of Propagation		66		%
Capacitance		31.08 [101.97]		pF/ft [pF/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	100	400	1,000			MHz
Insertion Loss (Typ.)	0.084	0.19	0.32			dB/ft
	0.28	0.62	1.05			dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB for the straight connector and 0.2 dB for the right angle connector.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMB Plug Right Angle to SMB Plug Using Flexible RG174 Coax Cable MTCA00121](#)



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Mechanical Specifications

Cable Assembly

Diameter 0.256 in [6.5 mm]

Cable

Cable Type RG174
Impedance 50 Ohms
Inner Conductor Type Stranded
Inner Conductor Material and Plating Copper Clad Steel
Dielectric Type PE
Number of Shields 1
Shield Layer 1 Tinned Copper Braid
Jacket Material PVC, Black
Jacket Diameter 0.11 in [2.79 mm]

Connectors

Description	Connector 1	Connector 2
Type	SMB Plug	SMB Plug Right Angle
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	30 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Nickel
Outer Conductor Plating Specification		100 µin minimum
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100 µin minimum	

Environmental Specifications

Temperature

Operating Range -40 to +80 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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MTCA00121

How to Order

Part Number Configuration:

MTCA00121

- **xx**

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Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: MTCA00121-12 = 12 inches long cable
MTCA00121-100cm = 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: [SMB Plug Right Angle to SMB Plug Using Flexible RG174 Coax Cable MTCA00121](#)

URL: <https://www.milestek.com/SMB-Plug-SMB-Plug-MTRG174AU-MTCA00121-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.

MTCA00121 CAD Drawing

SMB Plug Right Angle to SMB Plug Using Flexible RG174 Coax Cable

