

SMA Male to SMA Female Cable RG174 Coax in 12 Inch

The SMA male to SMA female 12 inch cable using RG174 coax, part number FMC00020-12, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to female gender configuration with 50 ohm flexible RG174 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00020-12 SMA male to SMA female cable assembly operates to 1 GHz.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		1,000	MHz
VSWR			1.4:1	
Velocity of Propagation		66		%
Capacitance	31.08 [101.97]			pF/ft [pF/m]

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	100	250	500	1,000		MHz
Insertion Loss (Max.)	0.28	0.32	0.39	0.52		dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Length* 12 in [304.8 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]



Configuration:

- SMA Male
- SMA Female
- RG174

Features:

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

Applications:

- General Purpose
- Laboratory Use

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Female
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Spec.	50 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating		Brass, Gold
Outer Cond Plating Spec.		3 µin minimum
Body Material & Plating	Brass, Nickel	
Body Plating Spec.	100 µin minimum	
Coupling Nut Material & Plating	Brass, Nickel	
Coupling Nut Plating Spec.	100 µin minimum	
Hex Size	5/16 inch	1/4 inch
Torque	3 in-lbs 0.34 Nm	

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.

How to Order

Part Number Configuration:

FMC00020 - xx uu

cm = Centimeters
 <blank> = Inches

Length

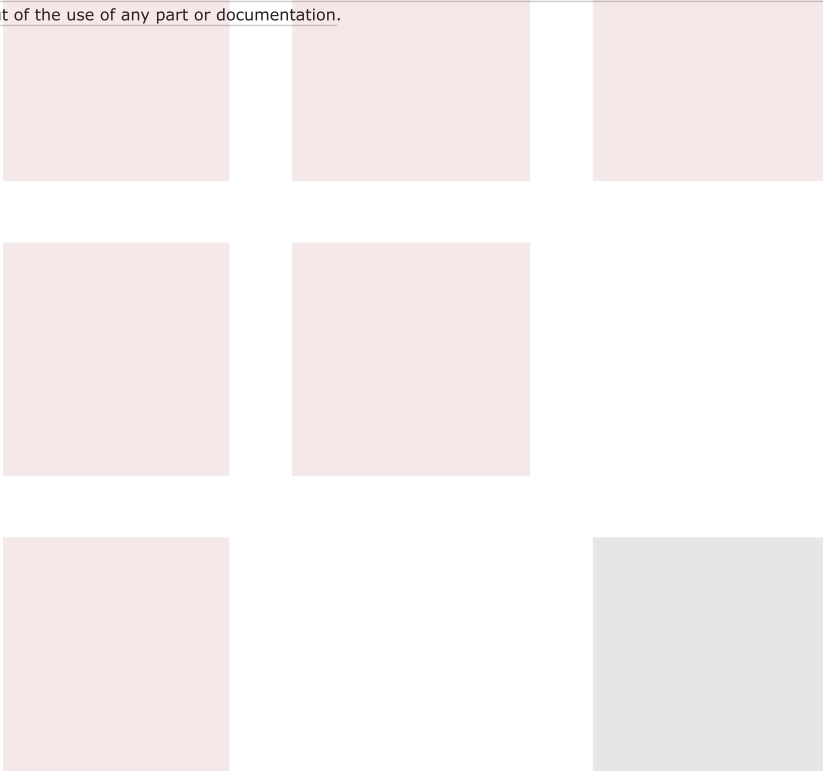
Example: FMC00020-12 = 12 inches long cable
 FMC00020-100cm = 100 cm long cable

SMA Male to SMA Female Cable RG174 Coax in 12 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

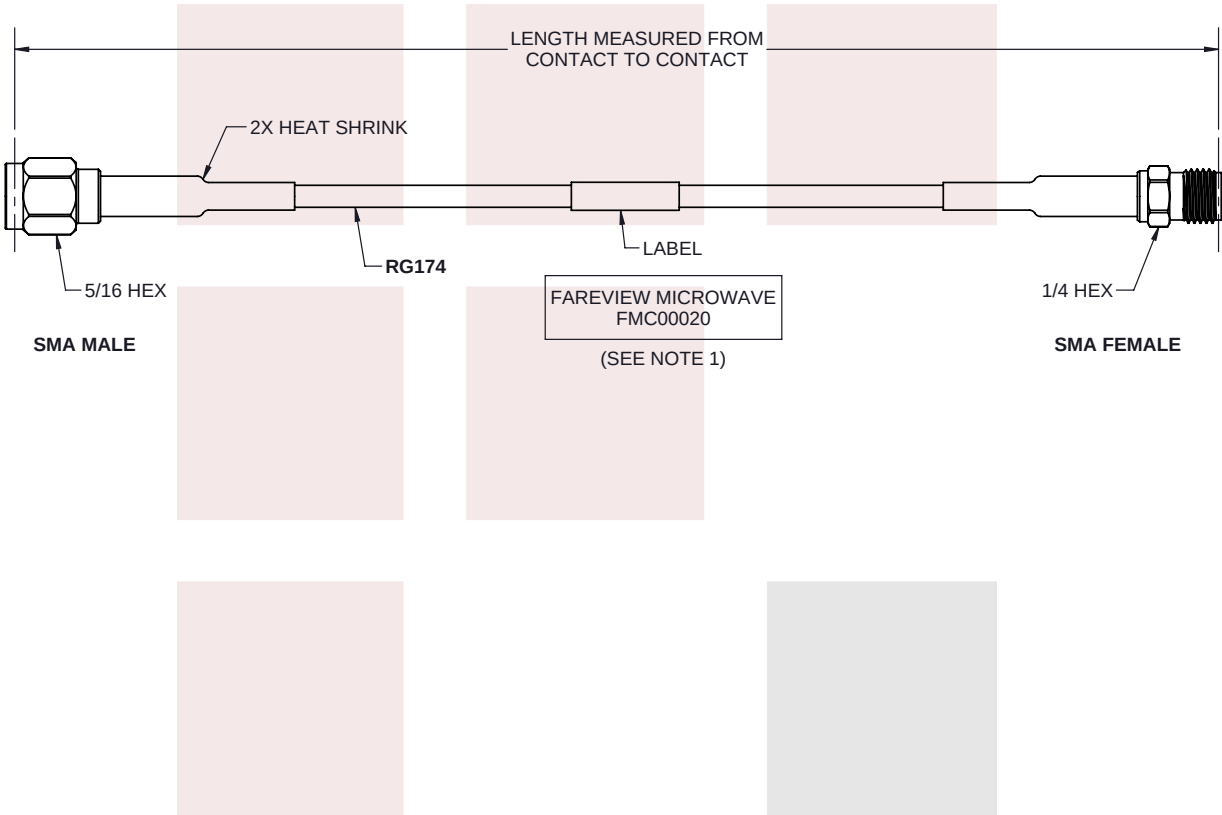
Click the following link to obtain additional part information: [SMA Male to SMA Female Cable RG174 Coax in 12 Inch FMC00020-12](#)

URL: <https://www.fairviewmicrowave.com/sma-male-sma-female-cable-rg174-coax-fmc00020-12-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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
AA	INITIAL RELEASE	09/11/2020	SELLIS



- NOTES:
1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED.
CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH
END 6.0" FROM THE END OF THE CONNECTOR.

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TITLE		TOLERANCES:		CABLE LENGTH (L) TOLERANCES:	
SMA Male to SMA Female Cable RG174 Coax in 12 Inch		.X = ±.2 [.508] FRACTIONS		L ≤ 12 [305] = +1 [25] / -0	
		.XX = ±.02 [.51] ± 1/32		12 [305] < L ≤ 60 [1524] = +2 [51] / -0	
		.XXX = ±.005 [.13] ANGLES ± 1°		60 [1524] < L ≤ 120 [3048] = +4 [102] / -0	
				120 [3048] < L ≤ 300 [7620] = +6 [152] / -0	
				300 [7620] < L = +5%L / -0	
		ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.		SCALE	
				N/A	
SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV	
A	3FKR5	BPUCHASKI	FMC00020	A	

T-Rev.D