

## SMA Female to N Male Cable RG174 Coax

**FMC00051**

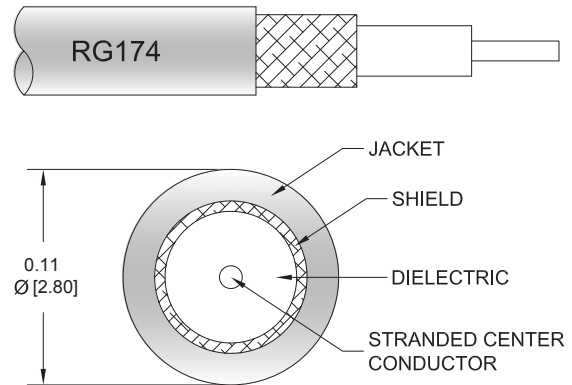


### Configuration

- Connector 1: SMA Female
- Connector 2: N Male
- Cable Type: RG174
- Coax Flex Type: Flexible

### Features

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



### Applications

- General Purpose
- Laboratory Use

### Description

The SMA female to type N male cable using RG174 coax, part number FMC00051, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to type N cable assembly has a female to male 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 FMC00051 SMA female to type N male 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	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

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### FMC00051



Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
		Frequency	100	250	500	1000	MHz	
FMC00051	Custom Lengths Available	Insertion Loss (Typ.)	0.08	0.14	0.211	0.32	dB/ft	
			0.28	0.45	0.7	1.05	dB/m	
FMC00051-12	12 inch	Insertion Loss (Typ.)	0.37	0.42	0.5	0.6	dB	0.084
FMC00051-24	24 inch	Insertion Loss (Typ.)	0.45	0.56	0.71	0.92	dB	0.093
FMC00051-36	36 inch	Insertion Loss (Typ.)	0.54	0.7	0.92	1.24	dB	0.102
FMC00051-48	48 inch	Insertion Loss (Typ.)	0.62	0.83	1.13	1.56	dB	0.111
FMC00051-72	72 inch	Insertion Loss (Typ.)	0.79	1.11	1.55	2.2	dB	0.129

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.1 dB  
 Loss due to Connector 2: 0.18 dB  
 Base Weight: 0.084 pounds  
 Additional Weight per Inch: 0.00075 pounds

## Mechanical Specifications

### Cable Assembly

Weight 0.084 lbs [38.1 g]

### 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]

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### Connectors

Description	Connector 1	Connector 2
Type	SMA Female	N Male
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		500
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	50 µin minimum	
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Gold	
Outer Conductor Plating Specification	3 µin minimum	
Body Material and Plating		Brass, Nickel
Coupling Nut Material and Plating		Brass, Nickel
Hex Size	1/4 inch	

### Environmental Specifications

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

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### Typical Performance Data

### How to Order

Part Number Configuration:

**FMC00051**

**- xx**

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

Example: FMC00051-12 = 12 inches long cable  
FMC00051-100cm = 100 cm long cable

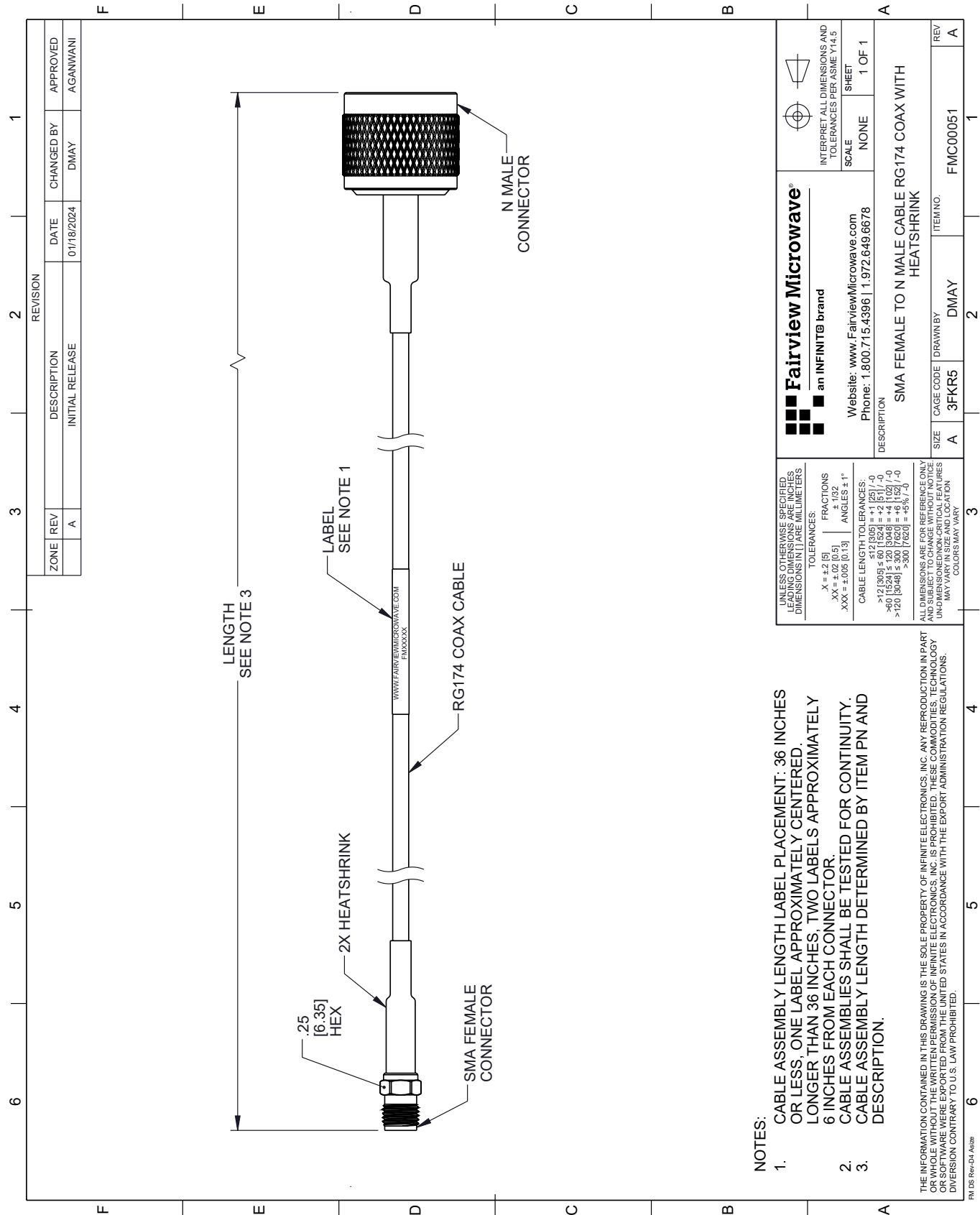
SMA Female to N Male Cable RG174 Coax from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA Female to N Male Cable RG174 Coax FMC00051](#)

URL: <https://www.fairviewmicrowave.com/sma-female-to-n-male-cable-rg174-coax-fmc00051-p.aspx>

The information contained within 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 liability arising out of the use of any part or document.

FMC00051 CAD Drawing  
SMA Female to N Male Cable RG174 Coax



- NOTES:
- CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS; ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
  - CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
  - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.