

Low Loss SMA Male to N Female Cable LMR-195 Coax



FMC00139

Configuration

- Connector 1: SMA Male
- Connector 2: N Female
- Cable Type: LMR-195
- Coax Flex Type: Flexible

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket

Applications

- General Purpose
- Laboratory Use

Description

The SMA male to type N female cable using LMR-195 coax, part number FMC00139, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to type N cable assembly has a male to female gender configuration with 50 ohm flexible LMR-195 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00139 SMA male to type N female cable assembly operates to 5.8 GHz. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 90 dB.

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		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		80		%
RF Shielding	90			dB
Group Delay		1.27 [4.17]		ns/ft [ns/m]
Capacitance		25.4 [83.33]		pF/ft [pF/m]
Inductance		0.064 [0.21]		uH/ft [uH/m]
DC Resistance Inner Conductor		7.6 [24.93]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		4.9 [16.08]		Ohms/1000ft [Ohms/Km]
Jacket Spark			3,000	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	5800	MHz	
FMC00139	Custom Lengths Available	Insertion Loss (Typ.)	0.06	0.08	0.116	0.19	0.299	dB/ft	
			0.19	0.27	0.39	0.63	0.99	dB/m	
FMC00139-12	12 inch	Insertion Loss (Typ.)	0.26	0.29	0.32	0.39	0.5	dB	0.112
FMC00139-24	24 inch	Insertion Loss (Typ.)	0.32	0.37	0.44	0.58	0.8	dB	0.135
FMC00139-36	36 inch	Insertion Loss (Typ.)	0.38	0.45	0.55	0.77	1.1	dB	0.157
FMC00139-48	48 inch	Insertion Loss (Typ.)	0.43	0.53	0.67	0.96	1.4	dB	0.179
FMC00139-60	60 inch	Insertion Loss (Typ.)	0.49	0.61	0.78	1.15	1.7	dB	0.201

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:	0.1 dB
Base Weight:	0.112 pounds
Additional Weight per Inch:	0.00184 pounds

Mechanical Specifications

Cable Assembly

Weight	0.112 lbs [50.8 g]
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Cable

Cable Type	LMR-195
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, Black
Jacket Diameter	0.195 in [4.95 mm]
One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	2 in [50.8 mm]
Bending Moment	0.2 lbs-ft [0.27 N-m]
Flat Plate Crush	15 lbs/in [0.27 Kg/mm]
Tensile Strength	40 lbs [18.14 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	N Female
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Silver
Contact Plating Specification	ASTM B488	QQ-S-365
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Nickel
Body Material and Plating	Passivated Stainless Steel	Brass, Nickel
Body Plating Specification		QQ-N-290
Coupling Nut Material and Plating	Passivated Stainless Steel	
Hex Size	5/16 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:

FMC00139

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Unit of Measure:
cm = Centimeters
<blank> = Inches

Length

Base Number

Example: FMC00139-12 = 12 inches long cable
FMC00139-100cm = 100 cm long cable

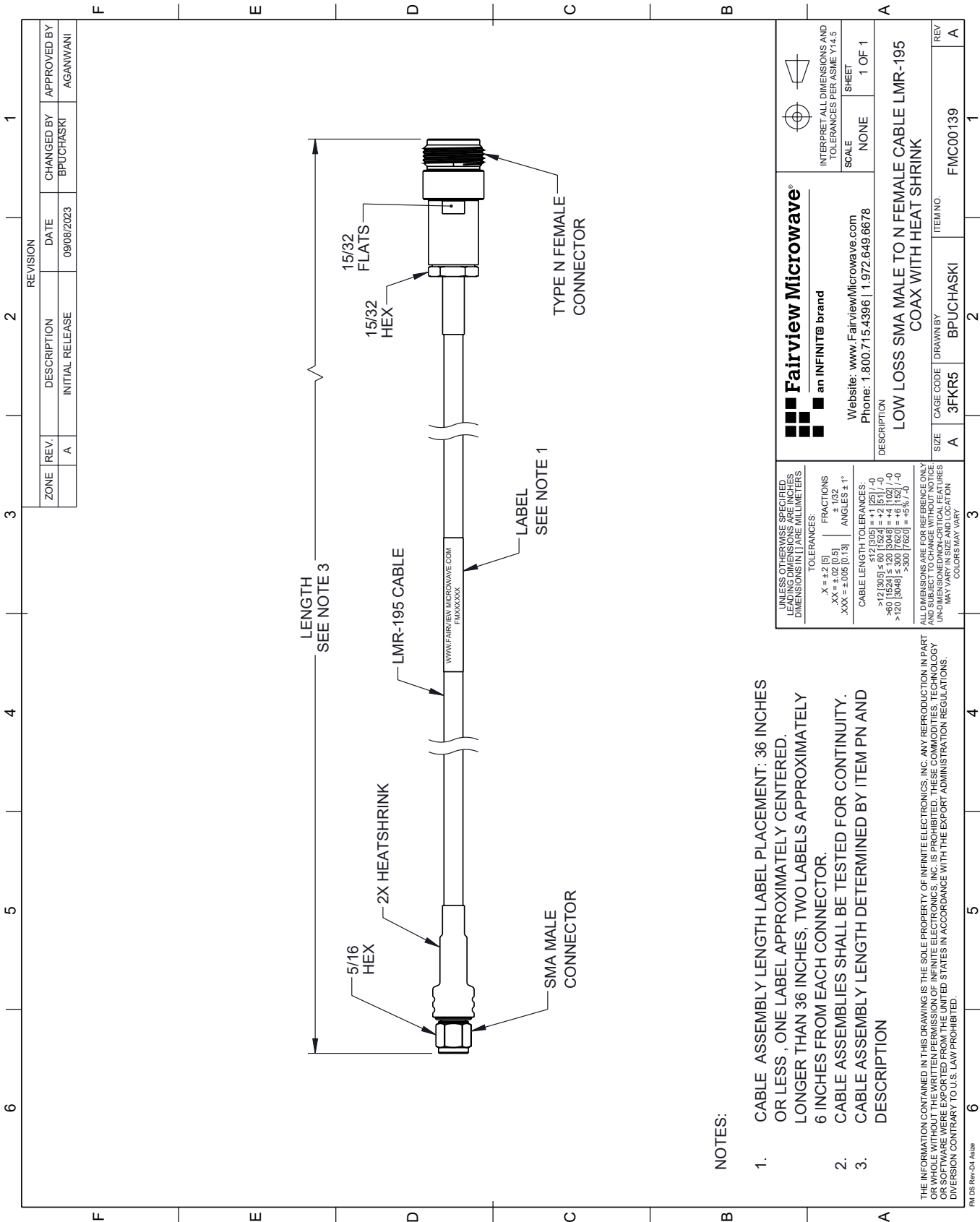
Low Loss SMA Male to N Female Cable LMR-195 Coax from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Low Loss SMA Male to N Female Cable LMR-195 Coax FMC00139](#)

URL: <https://www.fairviewmicrowave.com/low-loss-sma-male-to-n-female-cable-lmr-195-coax-fmc00139-p.aspx>

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FMC00139 CAD Drawing
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NOTES:

- 1. 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.
- 2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
- 3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION

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Fairview Microwave® an INFINITI® brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5				
		SCALE	SHEET	1 OF 1		
Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678		DESCRIPTION LOW LOSS SMA MALE TO N FEMALE CABLE LMR-195 COAX WITH HEAT SHRINK				
TOLERANCES: X = ±.2 [5] FRACTIONS XX = ±.02 [0.5] ANGLES ± 1° XXX = ±.005 [0.13]		SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
CABLE LENGTH TOLERANCES: >12 [305] ≤ 60 [1524] = ±.1 [25] / -0 >60 [1524] ≤ 120 [3048] = ±.1 [25] / -0 >120 [3048] ≤ 300 [7620] = ±.1 [25] / -0 >300 [7620] = ±.1 [25] / -0		A	3FKR5	BPUCHASKI	FMC00139	A
ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/ NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.						