

# FMC00322-50CM DATA SHEET

# RA SMA Male to N Female Cable LMR-195 Coax in 50 CM

The RA SMA male to type N female 50 cm cable using LMR-195 coax, part number FMC00322-50CM, 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 FMC00322-50CM SMA male to type N female cable assembly operates to 5.8 GHz. The right angle SMA interface on the LMR-195 cable allows for easier connections in tight spaces. 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	Min	Т	ур	Max	U	Jnits	
Frequency Range	DC			5.8		GHz	
VSWR				1.4:1			
Velocity of Propagation		8	30			%	
RF Shielding	90					dB	
Group Delay		1.27	[4.17]		ns/f	t [ns/n	n]
Capacitance		25.4	[83.33]		pF/f	t [pF/n	n]
Inductance		0.064	[0.21]		uH/f	t [uH/r	n]
DC Resistance Inner Cor	nductor	7.6 [	24.93]		Ω/100	Oft [Ω/I	Km]
DC Resistance Outer Cor	nductor	4.9 [	16.08]		Ω/100	Oft [Ω/I	Km]
Jacket Spark				3,000	V	/rms	

# **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.39	0.43	0.49	0.61	0.79	dB

#### **Electrical Specification Notes:**

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB for the straight connector and 0.2 dB for the right angle connector.

#### **Mechanical Specifications**

#### **Cable Assembly**

Length\* Diameter 19.68 in [499.87 mm] 0.5 in [12.7 mm]



# **Configuration:**

- SMA Male Right Angle
- N Female
- LMR-195

# Features:

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

# **Applications:**

- General Purpose
- Laboratory Use

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#### Cable

Cable Type LMR-195 **Impedance** 50 Ohms Inner Conductor Type Solid Inner Conductor Material and Plating Copper PE (F) Dielectric Type Number of Shields

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] 15 lbs/in [0.27 Kg/mm] Flat Plate Crush

Tensile Strength 40 lbs [18.14 Kg]

#### **Connectors**

Description	Connector 1	Connector 2
Туре	SMA Male	N Female
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Gold	Brass, Silver
Contact Plating Spec.	50 μin minimum	QQ-S-365
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plati	ng	Brass, Nickel
Body Material & Plating	Brass, Gold	Brass, Nickel
Body Plating Spec.	3 µin minimum	QQ-N-290
Coupling Nut Material & Pla	ting Brass, Gold	
Coupling Nut Plating Spec.	3 µin minimum	
Hex Size	16-May inch	

#### Mechanical Specification Notes:

# **Environmental Specifications Temperature**

Operating Range

-40 to +85 deg C Storage Range -70 to +85 deg C

**Compliance Certifications** (see product page for current document)

# **Plotted and Other Data**

Notes:

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<sup>\*</sup>All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.





#### **How to Order**

Part Number Configuration:	FMC00322 -	XX	uu	
				cm = Centimeters <blank> = Inches</blank>
				Length

Example: FMC00322-12 = 12 inches long cable

FMC00322-100cm = 100 cm long cable

RA SMA Male to N Female Cable LMR-195 Coax in 50 CM 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: RA SMA Male to N Female Cable LMR-195 Coax in 50 CM FMC00322-50CM

URL: https://www.fairviewmicrowave.com/ra-sma-male-n-female-cable-lmr195-coax-fmc00322-50cm-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.

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