

## RA SMA Male to RA SMA Male Cable LMR-195 Coax in 48 Inch

The RA SMA male to RA SMA male 48 inch cable using LMR-195 coax, part number FMC00113-48, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to male 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 FMC00113-48 SMA male to SMA male cable assembly operates to 5.8 GHz. The right angle SMA interfaces on the LMR-195 cable allow 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	Typ	Max	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]		$\Omega$ /1000ft [ $\Omega$ /Km]
DC Resistance Outer Conductor		4.9 [16.08]		$\Omega$ /1000ft [ $\Omega$ /Km]
Jacket Spark			3,000	Vrms

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.62	0.72	0.86	1.15	1.59	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 0.2 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Length\* 48 in [121.92 cm]  
 Diameter 0.312 in [7.92 mm]

#### Cable

Cable Type LMR-195



### Configuration:

- SMA Male Right Angle
- SMA Male Right Angle
- LMR-195

### Features:

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

### Applications:

- General Purpose
- Laboratory Use
- Antenna Installations
- Land Mobile Radio & Other Communication Systems
- Cellular & Wi-Fi Systems

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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]

**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Gold	Brass, Gold
Contact Plating Spec.	50 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Gold	Brass, Gold
Body Plating Spec.	3 µin minimum	3 µin minimum
Coupling Nut Material & Plating	Brass, Gold	Brass, Gold
Coupling Nut Plating Spec.	3 µin minimum	3 µin minimum
Hex Size	5/16 inch	5/16 inch

**Mechanical Specification Notes:**

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

**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:

**How to Order**

Part Number Configuration:

**FMC00113 - xx uu**



Example: FMC00113-12 = 12 inches long cable  
FMC00113-100cm = 100 cm long cable

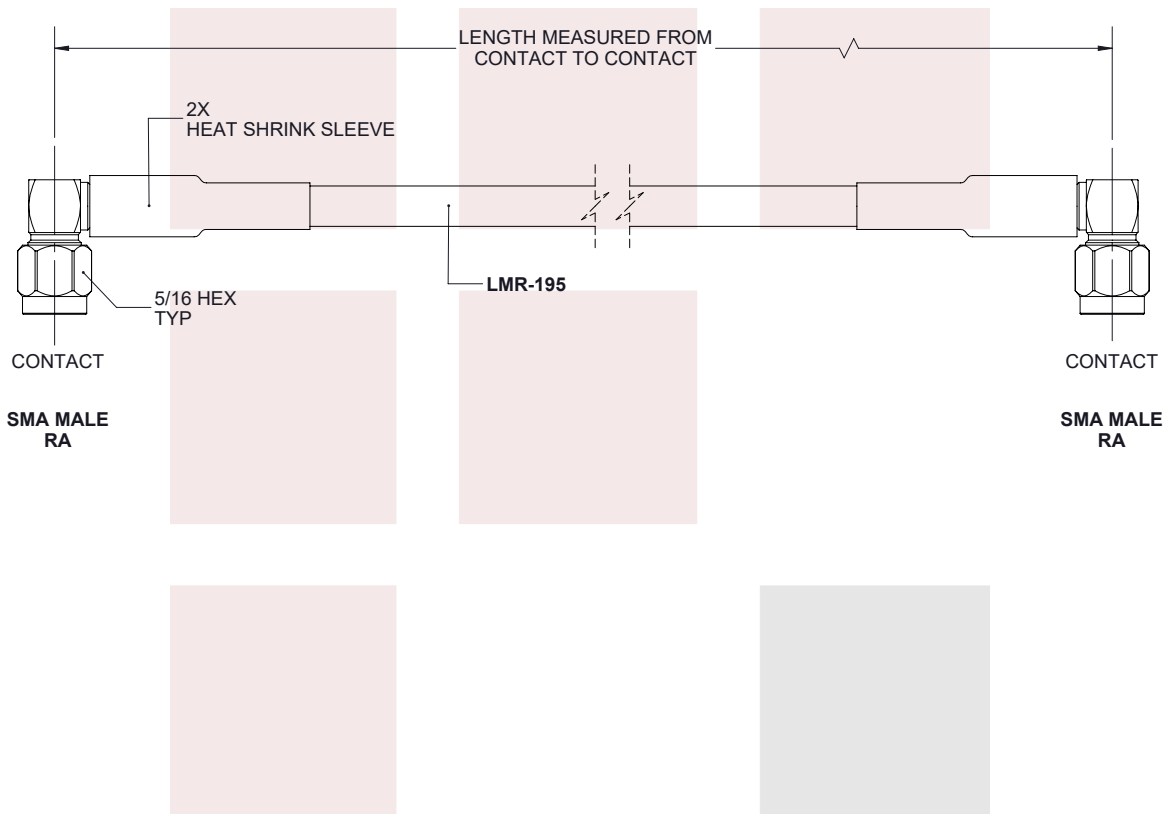
RA SMA Male to RA SMA Male Cable LMR-195 Coax in 48 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [RA SMA Male to RA SMA Male Cable LMR-195 Coax in 48 Inch FMC00113-48](#)

URL: <https://www.fairviewmicrowave.com/ra-sma-male-ra-sma-male-cable-lmr195-coax-fmc00113-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
A	INITIAL RELEASE	2/19/2020	S.ELLIS



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TITLE  
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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:		CABLE LENGTH (L) TOLERANCES:	
.X = ±.2 [ .51 ]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0	
.XX = ±.02 [ .51 ]	ANGLES ± 1°	12 [305] < L ≤ 60 [1524] = +2 [51] / -0	
.XXX = ±.005 [ .13 ]		60 [1524] < L ≤ 120 [3048] = +4 [102] / -0	
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0	
		300 [7620] < L = +5%L / -0	

THIRD-ANGLE PROJECTION  
  
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ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.					SCALE	N/A
SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV		
A	3FKR5	K.DANG	FMC00113	A		

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