

RA SMA Male to RA SMA Male Cable LMR-195 Coax in 150 CM

The RA SMA male to RA SMA male 150 cm cable using LMR-195 coax, part number FMC00113-150CM, 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 FMC00113-150CM 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] | | Ω /1000ft [Ω /Km] |
| DC Resistance Outer Conductor | | 4.9 [16.08] | | Ω /1000ft [Ω /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.) | 0.68 | 0.8 | 0.97 | 1.33 | 1.87 | 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* 59.05 in [149.99 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 $\pm 3/8"$, 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)

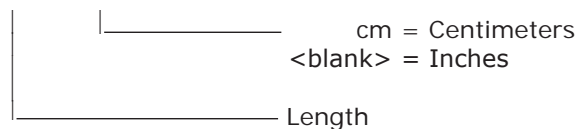
Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMC00113 - xx uu



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

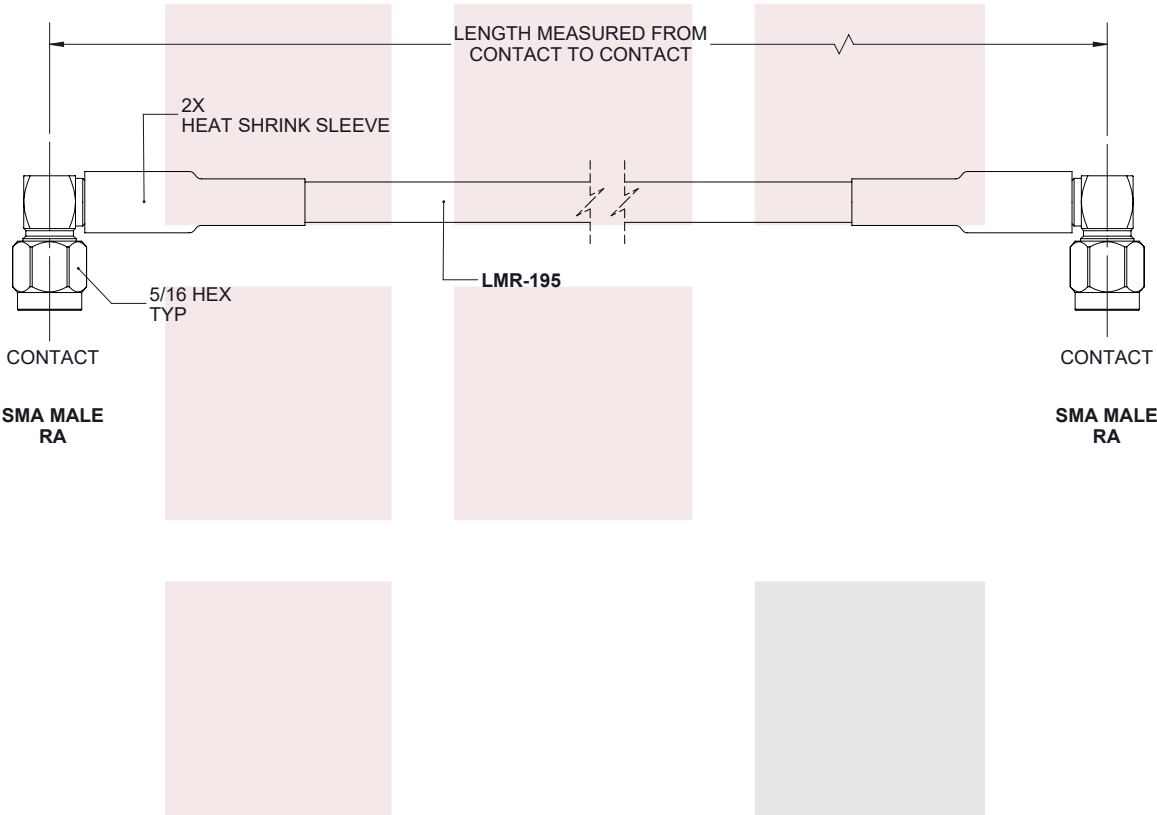
RA SMA Male to RA SMA Male Cable LMR-195 Coax in 150 CM from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [RA SMA Male to RA SMA Male Cable LMR-195 Coax in 150 CM FMC00113-150CM](https://www.fairviewmicrowave.com/ra-sma-male-ra-sma-male-cable-lmr195-coax-fmc00113-p.aspx)


URL: <https://www.fairviewmicrowave.com/ra-sma-male-ra-sma-male-cable-lmr195-coax-fmc00113-p.aspx>

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| REVISIONS | | | |
|-----------|-----------------|-----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 2/19/2020 | S.ELLIS |



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| TITLE | | TOLERANCES: | | CABLE LENGTH (L) TOLERANCES: | |
| RA SMA Male to RA SMA Male Cable LMR-195 Coax in 150 CM | | .X = ±.2 [.508] FRACTIONS ± 1/32 | | L ≤ 12 [305] = +1 [25] / -0 | |
| | | .XX = ±.02 [.51] ANGLES ± 1° | | 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 | |
| | | | | 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. | | SHEET 1 OF 1 | |
| | | SIZE A | | SCALE N/A | |
| | | CAGE CODE 3FKR5 | | DRAWN BY K.DANG | |
| | | | | ITEM NO. FMC00113 | |
| | | | | REV A | |

T-Rev.D