

SMA Female to SMA Female Cable LMR-195 Coax with Heat Shrink

The SMA female to SMA female cable using LMR-195 coax, part number FMC00519, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a female 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 FMC00519 SMA female to SMA 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 | 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] |
| Operating Voltage (AC) | | | 500 | Vrms |
| Dielectric Withstanding Voltage (DC) | | | 1,000 | Vdc |
| Jacket Spark | | | 3,000 | Vrms |
| Input Power (Peak) | | | 2.5 | KWatts |

Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency | 0.25 | 0.5 | 1 | 2.5 | 5.8 | GHz |
| Insertion Loss (Typ.) | 0.06 | 0.08 | 0.12 | 0.19 | 0.3 | dB/ft |
| | 0.2 | 0.26 | 0.39 | 0.62 | 0.98 | dB/m |

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1dB per connector loss.

Mechanical Specifications

Cable Assembly

Diameter 0.25 in [6.35 mm]



Configuration:

- SMA Female
- SMA 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 |
| 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 Female | SMA Female |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material & Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Contact Plating Spec. | 50µ in. minimum | 50µ in. minimum |
| Dielectric Type | PTFE | PTFE |
| Body Material & Plating | Brass, Nickel | Brass, Nickel |
| Body Plating Spec. | 100µ in. minimum | 100µ in. minimum |

Environmental Specifications
Temperature

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

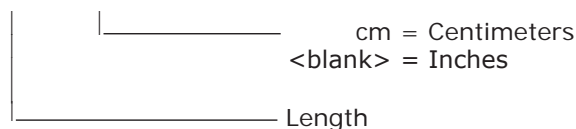
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMC00519 - xx uu


Example: FMC00519-12 = 12 inches long cable
 FMC00519-100cm = 100 cm long cable

SMA Female to SMA Female Cable LMR-195 Coax with Heat Shrink from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

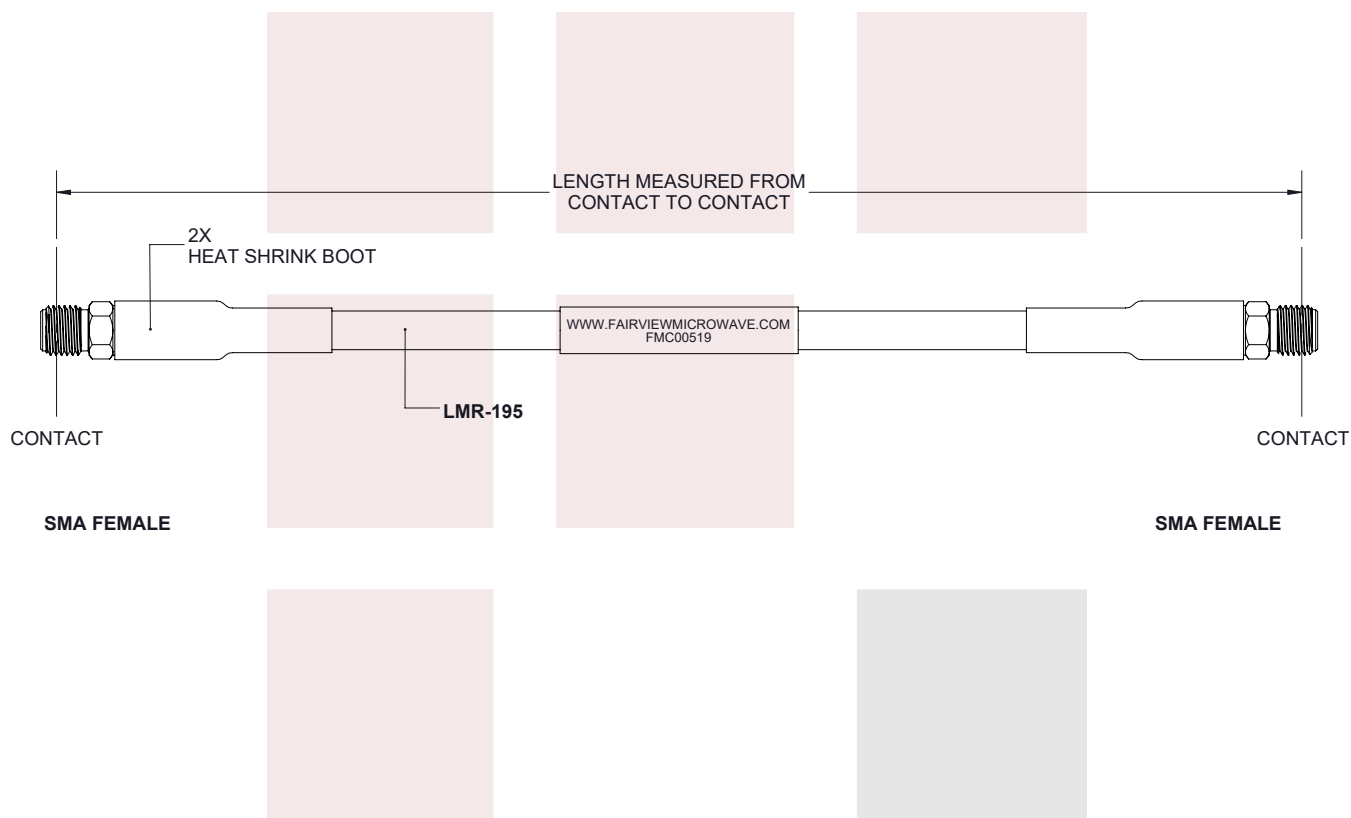
Click the following link to obtain additional part information: [SMA Female to SMA Female Cable LMR-195 Coax with Heat Shrink FMC00519](#)

URL: <https://www.fairviewmicrowave.com/sma-female-sma-female-cable-lmr195-coax-fmc00519-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 | 4/16/2021 | S.ELLIS |



NOTES:

1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END 6.0" FROM THE END OF THE CONNECTOR.

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| TITLE | | SMA Female to SMA Female Cable LMR-195 Coax with Heat Shrink | | | |
| | | ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. | | | |
| | | SCALE | | | |
| | | 1 OF 1 | | | |
| | | N/A | | | |
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. | REV | |
| A | 3FKR5 | K.DANG | FMC00519 | A | |

T-Rev.D