

Low Loss SMA Female to SMA Female Cable LMR-195 Coax in 50 CM

The SMA female to SMA female 50 cm cable using LMR-195 coax, part number FMC00519-50CM, 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 FMC00519-50CM 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.)	0.3	0.34	0.4	0.52	0.69	dB

Electrical Specification Notes:

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

Mechanical Specifications

Cable Assembly

Length*	19.68 in [499.87 mm]
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

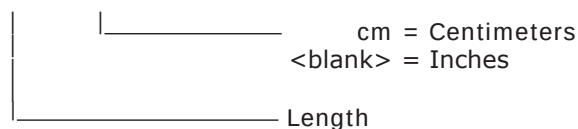
Compliance Certifications (see [product page](#) for current document)

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

Low Loss SMA Female to SMA Female Cable LMR-195 Coax in 50 CM 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.

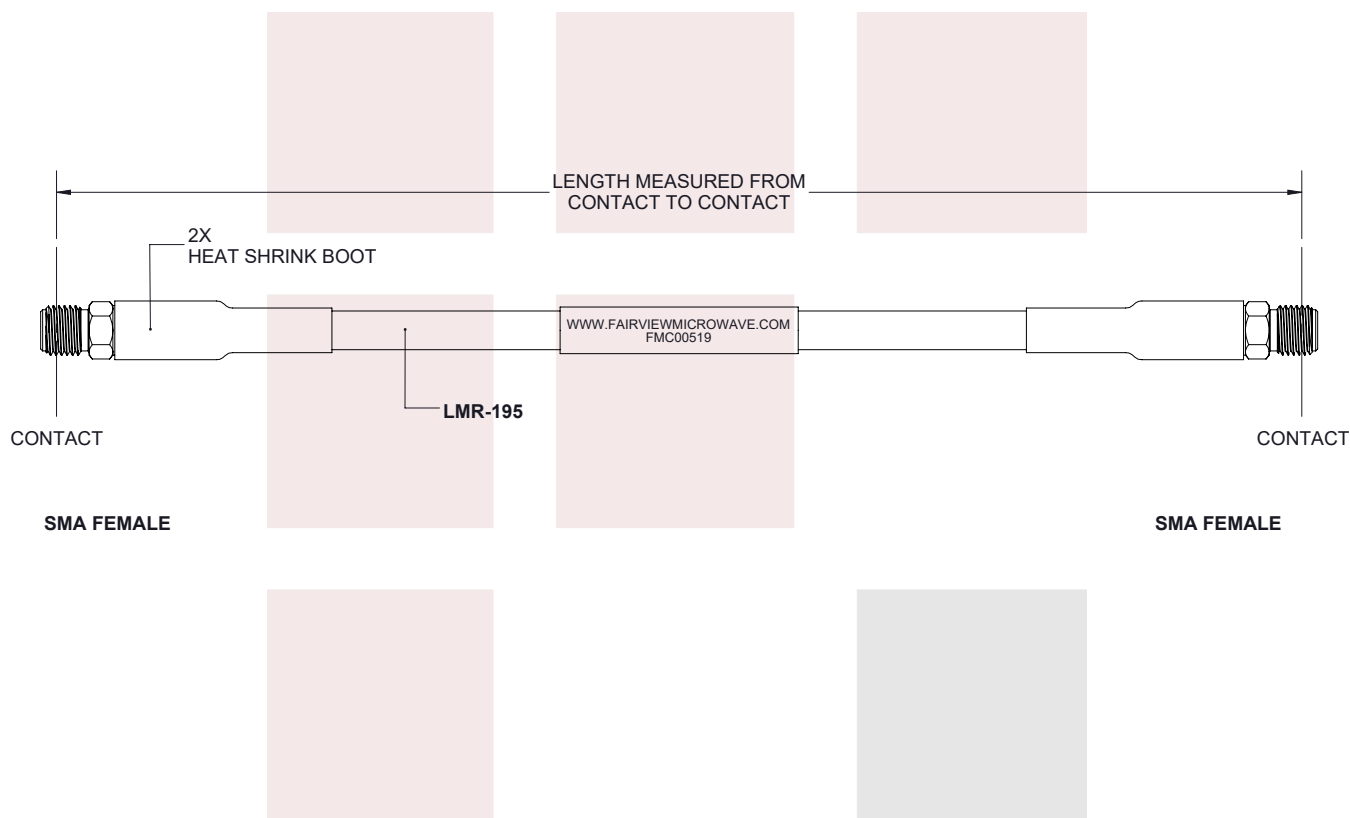
Click the following link to obtain additional part information: [Low Loss SMA Female to SMA Female Cable LMR-195 Coax in 50 CM FMC00519-50CM](#)

URL: <https://www.fairviewmicrowave.com/sma-female-sma-female-cable-lmr195-coax-fmc00519-50cm-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.



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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Fairview Microwave an INFINITE brand		UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS		THIRD-ANGLE PROJECTION	
TITLE		TOLERANCES: CABLE LENGTH (L) TOLERANCES:		THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.	
Low Loss SMA Female to SMA Female Cable LMR-195 Coax in 50 CM		$.X = \pm .2$ [5.08] FRACTIONS $.XX = \pm .02$ [.51] $\pm 1/32$ $.XXX = \pm .005$ [.13] ANGLES $\pm 1^\circ$		$L \leq 12$ [305] = ± 1 [25] / -0 12 [305] < $L \leq 60$ [1524] = ± 2 [51] / -0 60 [1524] < $L \leq 120$ [3048] = ± 4 [102] / -0 120 [3048] < $L \leq 300$ [7620] = ± 6 [152] / -0 300 [7620] < $L = +5\%L$ / -0	
		ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.		SHEET 1 OF 1	
		SCALE N/A			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV	
A	3FKR5	K.DANG	FMC00519	A	

T-Rev.D