

Low Loss 1.0/2.3 Plug to SMA Male Cable LMR-195 Coax

The 1.0/2.3 plug to SMA male cable using LMR-195 coax, part number FMCA3181, from Fairview Microwave is in-stock and ships same day. This Fairview 1.0/2.3 to SMA cable assembly has a plug 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 FMCA3181 1.0/2.3 plug to SMA male cable assembly operates to 4 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		4	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	0.1	0.25	0.5	1	4	GHz
Insertion Loss (Typ.)	0.035	0.057	0.082	0.116	0.239	dB/ft
	0.11	0.19	0.27	0.38	0.78	dB/m

Electrical Specification Notes:

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

Mechanical Specifications

Cable Assembly

Weight 0.06 lbs [27.22 g]

Cable

Cable Type LMR-195
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper



Configuration:

- 1.0/2.3 Plug
- SMA Male
- LMR-195

Features:

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket

Applications:

- General Purpose
- Laboratory Use

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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	1.0/2.3 Plug	SMA Male
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Gold	Brass, Gold
Contact Plating Spec.	30 µin minimum	ASTM B488
Dielectric Type	PTFE	Teflon
Body Material & Plating	Brass, Nickel	Passivated Stainless Steel
Body Plating Spec.	100 µin minimum	
Coupling Nut Material & Plating		Passivated Stainless Steel
Hex Size		5/16 Inch

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

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMCA3181 - xx uu

cm = Centimeters
 <blank> = Inches

Length

Example: FMCA3181-12 = 12 inches long cable
 FMCA3181-100cm = 100 cm long cable

Low Loss 1.0/2.3 Plug to SMA Male Cable LMR-195 Coax 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 1.0/2.3 Plug to SMA Male Cable LMR-195 Coax FMCA3181](https://www.fairviewmicrowave.com/low-loss-1.0-2.3-plug-to-sma-male-cable-lmr-195-coax-fmca3181-p.aspx)

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