

## FMC00117-36 DATA SHEET

## Low Loss SMA Male to SMA Female Bulkhead Cable LMR-195 Coax in 36 Inch

The SMA male to SMA female bulkhead cable using LMR-195 coax, part number FMC00117-36, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male 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 FMC00117-36 SMA male to SMA female cable assembly operates to 5.8 GHz. Our RF cable assembly with SMA bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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	1	Min	T	ур	Max	ι	Jnits		
Frequency Range		DC			5.8		GHz		
VSWR					1.4:1				
Velocity of Propagation			8	80			%		
RF Shielding		90					dB		
Group Delay		1.27 [4.17]			ns/ft [ns/m]				
Capacitance			25.4 [	83.33]		pF/f	t [pF/m]		
Inductance			0.064	[0.21]		uH/f	t [uH/m]		
DC Resistance Inner Conductor				7.6 [24.93]			Ω/1000ft [Ω/Km]		
DC Resistance Outer Conductor		4.9 [	16.08]		Ω/100	0ft [Ω/Km]			
Jacket Spark					3,000	\	/rms		

### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.37	0.44	0.55	0.76	1.09	dB/ft
	1.21	1.44	1.8	2.49	3.58	dB/m

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 0.1 dB for the straight connector

# Mechanical Specifications Cable Assembly



## **Configuration:**

- SMA Male
- SMA Female Bulkhead
- 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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#### Cable

Cable Type LMR-195 50 Ohms **Impedance** 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	Connector 2					
Туре		SMA Male		SMA Female				
Mount Method			Bulkhead					
Specification				MIL-STD-348				
Impedance	50 Ohms			50 Ohms				
Contact Material & Plating		Brass, Gold		Beryllium Copp	er, Gol	ld		
Contact Plating Spec.		ASTM B488		50 µin minimum				
Dielectric Type		PTFE		PTFE				
Outer Cond Material & Plat	ing	Passivated Stainles	s Steel	Passivated Stainl	ess St	eel		
Body Material & Plating	Passivated Stainles							
Coupling Nut Material & Pla	ating	Passivated Stainles	s Steel					
Hex Size		5/16 Inch 5/16 inch						
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### **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**

FMC00117 - xx Part Number Configuration: uu cm = Centimeters <black> = Inches Length

FMC00117-12 = 12 inches long cable Example:

FMC00117-100cm = 100 cm long cable





Low Loss SMA Male to SMA Female Bulkhead Cable LMR-195 Coax in 36 Inch 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 Male to SMA Female Bulkhead Cable LMR-195 Coax in 36 Inch FMC00117-36

> 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

URL: https://www.fairviewmicrowave.com/low-loss-sma-male-sma-female-cable-lmr195-coax-fmc00117-36-p.aspx

to implem	ent improvements	s. Fairview	Microw	ave reserv	es the righ	nt to mak	ke such	changes	as req	uired.	Unless	s oth	erwise
stated, all	specifications are	e nominal.	Fairvie	w Microwa	ve does n	ot make	any re	presentat	ion or	warrar	ity reg	gardii	ng the
suitability	of the part descri	ibed hereir	for any	particular	purpose,	and Fair	rview M	icrowave	does i	not ass	ume a	any li	ability
arising out	t of the use of any	part or do	cument	ation.									





