

Low Loss RA SMA Male to SMA Female Bulkhead Cable LMR-100 Coax in 48 Inch

The RA SMA male to SMA female bulkhead 48 inch cable using LMR-100 coax, part number FMC00206-48, 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-100A coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00206-48 SMA male to SMA female cable assembly operates to 3 GHz. The right angle SMA interface on the LMR-100A cable allows for easier connections in tight spaces. 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	Min	Typ	Max	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor		81 [265.75]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ω /1000ft [Ω /Km]
Jacket Spark			2,000	Vrms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Max.)	0.54	0.58	0.7	0.9	1.7	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. Insertion Loss is estimated as 0.2 dB for the SMA Male connector and 0.1 dB for the SMA Female connector.

Mechanical Specifications

Cable Assembly

Length*	48 in [121.92 cm]
Diameter	0.433 in [11 mm]



Configuration:

- SMA Male Right Angle
- SMA Female Bulkhead
- LMR-100A

Features:

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

Applications:

- General Purpose
- Laboratory Use

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Cable

Cable Type	LMR-100A
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]

One Time Minimum Bend Radius	0.25 in [6.35 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]
Tensile Strength	15 lbs [6.8 Kg]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Female
Mount Method		Bulkhead
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Spec.	50 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating		Brass, Gold
Outer Cond Plating Spec.		3 µin minimum
Body Material & Plating	Brass, Nickel	
Body Plating Spec.	100 µin minimum	
Coupling Nut Material & Plating	Brass, Nickel	
Coupling Nut Plating Spec.	100 µin minimum	
Hex Size	16-May inch	16-May inch

Environmental Specifications
Temperature

Operating Range	-20 to +80 deg C
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Compliance Certifications (see [product page](#) for current document)

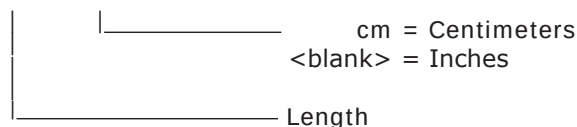
Plotted and Other Data
Notes:

- Values at 25°C, sea level.

How to Order

Part Number Configuration:

FMC00206 - xx uu



Example: FMC00206-12 = 12 inches long cable
FMC00206-100cm = 100 cm long cable

Low Loss RA SMA Male to SMA Female Bulkhead Cable LMR-100 Coax in 48 Inch 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: [Low Loss RA SMA Male to SMA Female Bulkhead Cable LMR-100 Coax in 48 Inch FMC00206-48](https://www.fairviewmicrowave.com/low-loss-ra-sma-male-sma-female-cable-lmr100-coax-fmc00206-48-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-loss-ra-sma-male-sma-female-cable-lmr100-coax-fmc00206-48-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	09/10/20	SELLIS

LENGTH MEASURED FROM CONTACT TO FLANGE

2X HEAT SHRINK

LMR-100A-PVC

LABEL

FAIRVIEW MICROWAVE
FMC00206
(SEE NOTE 1)

5/16 HEX

SMA MALE RIGHT ANGLE

11mm HEX

SMA FEMALE BULKHEAD

.126 [3.20] MAX. PANEL

.413 [10.50]

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

TITLE

Low Loss RA SMA Male to SMA Female Bulkhead Cable
LMR-100 Coax in 48 Inch

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:		CABLE LENGTH (L) TOLERANCES:	
.X = ±.2 [5.08]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0	
.XX = ±.02 [.51]		12 [305] < L ≤ 60 [1524] = +2 [51] / -0	
.XXX = ±.005 [.13]	ANGLES ± 1°	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.

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	BPUCHASKI	FMC00206	A

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A