

# FMC00301-12 DATA SHEET

# Snap-On RA MMBX Plug to SMA Female Cable LMR-100 Coax in 12 Inch

The RA MMBX plug snap-on to SMA female 12 inch cable using LMR-100 coax, part number FMC00301-12, from Fairview Microwave is in-stock and ships same day. This Fairview MMBX to SMA cable assembly has a plug 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 FMC00301-12 MMBX plug to SMA female cable assembly operates to 5.8 GHz. The right angle MMBX interface on the LMR-100A cable allows for easier connections in tight spaces. 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	Т	ур	Max	ι	Jnits	
Frequency Range	DC			5.8		GHz	
VSWR				1.4:1			
Velocity of Propagation		ć	66			%	
RF Shielding	90					dB	
Group Delay		1.54	[5.05]		ns/f	t [ns/n	n]
Capacitance		30.8 [	101.05]		pF/f	t [pF/r	n]
Inductance		0.077	[0.25]		uH/f	t [uH/r	m]
DC Resistance Inner Cor	nductor	81 [2	65.75]		Ω/100	Oft [Ω/	Km]
DC Resistance Outer Cor	nductor	9.5 [	31.17]		Ω/100	Oft [Ω/	Km]
Jacket Spark				2,000	١	/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.)	0.41	0.46	0.54	0.69	0.94	dB

#### **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 and 0.2 dB for the right angle connector.

#### **Mechanical Specifications**

**Cable Assembly** 

Length\* 12 in [304.8 mm]

Cable

Cable Type LMR-100A



### **Configuration:**

- Snap-OnMMBX Plug Right Angle
- SMA Female
- LMR-100A

#### Features:

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- · Double Shielded
- PVC Jacket

## **Applications:**

- General Purpose
- · Laboratory Use

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50 Ohms Impedance Inner Conductor Type Solid

Inner Conductor Material and Plating Copper Clad Steel Dielectric Type

PΕ

Number of Shields 2 Shield Layer 1 Aluminum Tape Shield Layer 2 Tinned Copper Braid Jacket Material PVC, Black

0.11 in [2.79 mm]

One Time Minimum Bend Radius Repeated Minimum Bend Radius

Bending Moment Flat Plate Crush Tensile Strength

0.25 in [6.35 mm] 1 in [25.4 mm] 0.1 lbs-ft [0.14 N-m]

10 lbs/in [0.18 Kg/mm] 15 lbs [6.8 Kg]

#### **Connectors**

Jacket Diameter

Description	Connector 1		Connector 2			
Туре	MMBX Plu	MMBX Plug				
Specification			MIL-STD-348A			
Impedance	50 Ohm	50 Ohms				
Connection Method	Snap-O	n				
Mating Cycles	100					
Contact Material & Plating	Beryllium Copp	Beryllium Copper, Gold		old		
Contact Plating Spec.			50 μin minimum			
Dielectric Type	PTFE		PTFE			
Outer Cond Material & Plati	ng Brass, Gold		Brass, Gold			
Outer Cond Plating Spec.			3 µin minimum	3 µin minimum		
Body Material & Plating	Brass, Go	old				
Hex Size			1/4 inch			

#### Mechanical Specification Notes:

# **Environmental Specifications**

**Temperature** 

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

**Compliance Certifications** (see product page for current document)

#### **Plotted and Other Data**

Notes:

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<sup>\*</sup>All cable assemblies have a length tolerance of 1.5% or  $\pm$  3/8", whichever is greater.





#### **How to Order**

Part Number Configuration:	FMC00301 -	XX	uu	
				cm = Centimeters <blank> = Inches</blank>
		1		- Length

Example: FMC00301-12 = 12 inches long cable

FMC00301-100cm = 100 cm long cable

Snap-On RA MMBX Plug to SMA Female Cable LMR-100 Coax in 12 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: Snap-On RA MMBX Plug to SMA Female Cable LMR-100 Coax in 12 Inch FMC00301-12

URL: https://www.fairviewmicrowave.com/ra-mmbx-plug-sma-female-cable-lmr100-coax-fmc00301-12-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.

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