

## Snap-On RA MMBX Plug to SMA Female Cable LMR-100 Coax in 60 Inch

The RA MMBX plug snap-on to SMA female 60 inch cable using LMR-100 coax, part number FMC00301-60, 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 FMC00301-60 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	Typ	Max	Units
Frequency Range	DC		5.8	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]		$\Omega/1000\text{ft}$ [ $\Omega/\text{Km}$ ]
DC Resistance Outer Conductor		9.5 [31.17]		$\Omega/1000\text{ft}$ [ $\Omega/\text{Km}$ ]
Jacket Spark		2,000		Vrms

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.87	1.12	1.5	2.28	3.5	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\* 60 in [152.4 cm]

#### 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

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	MMBX Plug	SMA Female
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Connection Method	Snap-On	
Mating Cycles	100	
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.		50 $\mu$ in minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating	Brass, Gold	Brass, Gold
Outer Cond Plating Spec.		3 $\mu$ in minimum
Body Material & Plating	Brass, Gold	
Hex Size		1/4 inch

**Mechanical Specification Notes:**

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

**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:

**FMC00301 - xx uu**

Length  
cm = Centimeters  
<blank> = Inches

Example: FMC00301-12 = 12 inches long cable  
FMC00301-100cm = 100 cm long cable

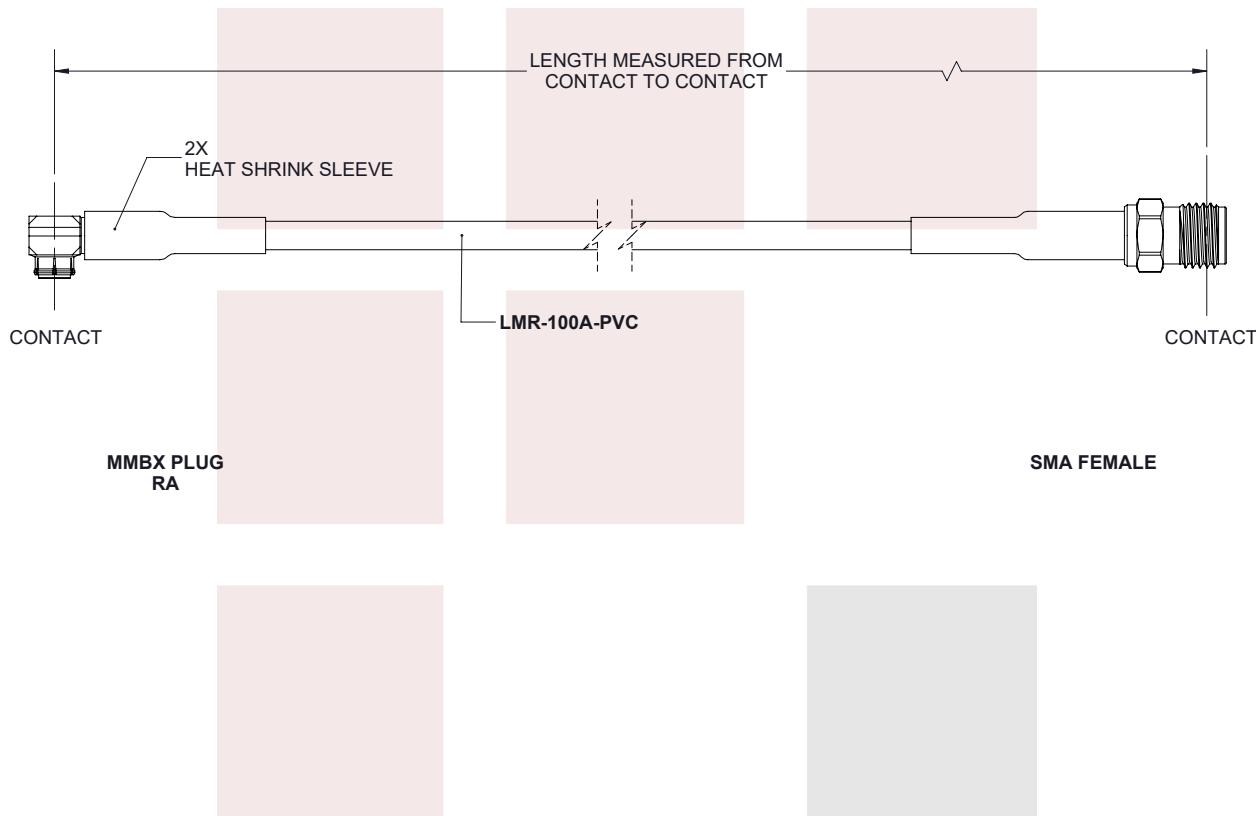
Snap-On RA MMBX Plug to SMA Female Cable LMR-100 Coax in 60 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Snap-On RA MMBX Plug to SMA Female Cable LMR-100 Coax in 60 Inch FMC00301-60](#)

URL: <https://www.fairviewmicrowave.com/ra-mmbx-plug-sma-female-cable-lmr100-coax-fmc00301-60-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	2/18/2020	S.ELLIS



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<p><b>Fairview Microwave™</b> an INFINITE brand</p> <p>TITLE</p> <p>Snap-On RA MMBX Plug to SMA Female Cable LMR-100 Coax in 60 Inch</p>	UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS		 <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p>
	TOLERANCES:	CABLE LENGTH (L) TOLERANCES:	
	$.X = \pm .2$ [5.08] $.XX = \pm .02$ [.51] $.XXX = \pm .005$ [.13]	FRACTIONS $\pm 1/32$ ANGLES $\pm 1^\circ$	$L \leq 12$ [305] = $\pm 1$ [25] / -0 $12 [305] < L \leq 60$ [1524] = $\pm 2$ [51] / -0 $60 [1524] < L \leq 120$ [3048] = $\pm 4$ [102] / -0 $120 [3048] < L \leq 300$ [7620] = $\pm 6$ [152] / -0 $300 [7620] < L = \pm 5\%L$ / -0
	ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.		SCALE N/A
SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. FMC00301 REV A

T-Rev.D