

Snap-On RA MMBX Plug to SMA Female Cable LMR-100 Coax in 200 CM

The RA MMBX plug snap-on to SMA female 200 cm cable using LMR-100 coax, part number FMC00301-200CM, 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 FMC00301-200CM 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] | | 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 | 0.25 | 0.5 | 1 | 2.5 | 5.8 | GHz |
| Insertion Loss (Typ.) | 1.05 | 1.38 | 1.87 | 2.91 | 4.5 | 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* 78.74 in [200 cm]



Configuration:

- Snap-On MMBX 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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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 | 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 µin minimum |
| Dielectric Type | PTFE | PTFE |
| Outer Cond Material & Plating | Brass, Gold | Brass, Gold |
| Outer Cond Plating Spec. | | 3 µin 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)

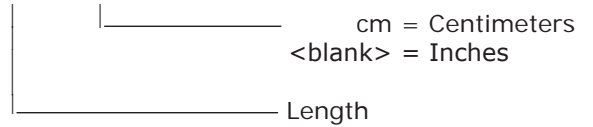
Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMC00301 - xx uu



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

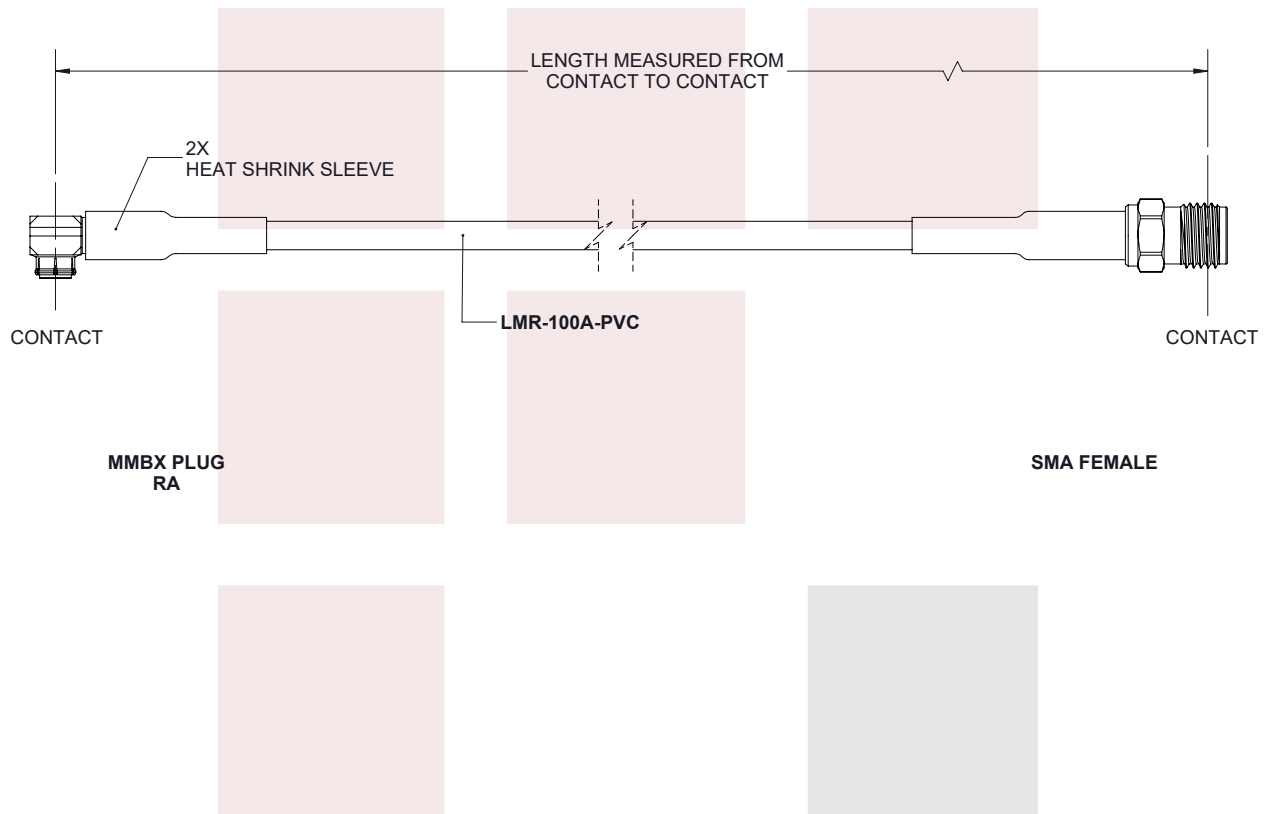
Snap-On RA MMBX Plug to SMA Female Cable LMR-100 Coax in 200 CM from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Snap-On RA MMBX Plug to SMA Female Cable LMR-100 Coax in 200 CM FMC00301-200CM](https://www.fairviewmicrowave.com/ra-mmbx-plug-sma-female-cable-lmr-100-coax-fmc00301-200cm)

URL: <https://www.fairviewmicrowave.com/ra-mmbx-plug-sma-female-cable-lmr100-coax-fmc00301-200cm-p.aspx>

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| REVISIONS | | | |
|-----------|-----------------|-----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 2/18/2020 | S.ELLIS |



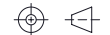
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TITLE
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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

| TOLERANCES: | | CABLE LENGTH (L) TOLERANCES: | |
|----------------------|------------------|---|--|
| .X = ±.2 [.508] | 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 | |

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

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