

## RA MMCX Plug to BNC Female Cable LMR-100 Coax in 150 CM

The RA MMCX plug to BNC female 150 cm cable using LMR-100 coax, part number FMC00318-150CM, from Fairview Microwave is in-stock and ships same day. This Fairview MMCX to BNC 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 FMC00318-150CM MMCX plug to BNC female cable assembly operates to 1 GHz. The right angle MMCX 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  |               | 1,000 | MHz                              |
| 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]   |       | $\Omega$ /1000ft [ $\Omega$ /Km] |
| DC Resistance Outer Conductor |     | 9.5 [31.17]   |       | $\Omega$ /1000ft [ $\Omega$ /Km] |
| Jacket Spark                  |     |               | 2,000 | Vrms                             |

### Performance by Frequency

| Description           | F1   | F2   | F3   | F4   | F5    | Units |
|-----------------------|------|------|------|------|-------|-------|
| Frequency             | 50   | 100  | 250  | 500  | 1,000 | MHz   |
| Insertion Loss (Typ.) | 0.55 | 0.64 | 0.87 | 1.12 | 1.48  | 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*  | 59.06 in [150.01 cm] |
| Diameter | 0.453 in [11.51 mm]  |



### Configuration:

- MMCX Plug Right Angle
- BNC Female
- LMR-100A

### Features:

- Max Frequency 1 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

### Applications:

- General Purpose
- Laboratory Use

Fairview Microwave  
 301 Leora Ln., Suite 100  
 Lewisville, TX 75056  
 Tel: 1-800-715-4396 / (972) 649-6678  
 Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

**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                       | MMCX Plug      | BNC Female      |
| Specification              | MIL-STD-348A   | MIL-STD-348A    |
| Impedance                  | 50 Ohms        | 50 Ohms         |
| Contact Material & Plating | Brass, Gold    | Brass, Gold     |
| Contact Plating Spec.      | 30 µin minimum | 30 µin minimum  |
| Dielectric Type            | PTFE           | PTFE            |
| Body Material & Plating    | Brass, Gold    | Brass, Nickel   |
| Body Plating Spec.         | 3 µin minimum  | 100 µin minimum |

**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)

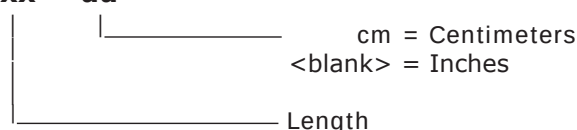
**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMC00318 - xx uu**



Example: FMC00318-12 = 12 inches long cable  
 FMC00318-100cm = 100 cm long cable

RA MMCX Plug to BNC Female Cable LMR-100 Coax in 150 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.

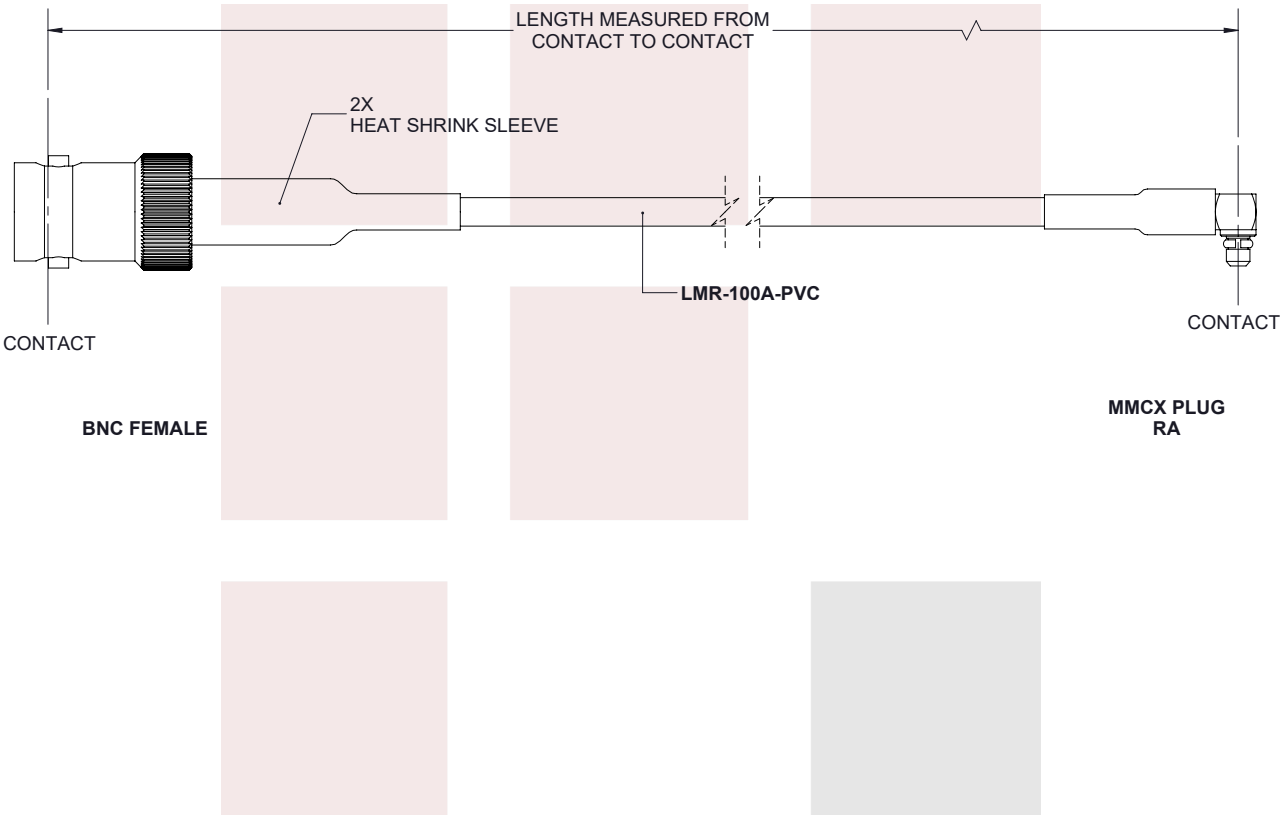
Click the following link to obtain additional part information: [RA MMCX Plug to BNC Female Cable LMR-100 Coax in 150 CM FMC00318-150CM](https://www.fairviewmicrowave.com/ra-mmcx-plug-bnc-female-cable-lmr100-coax-fmc00318-150cm-p.aspx)

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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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| TITLE<br><br>RA MMCX Plug to BNC Female Cable LMR-100 Coax in 150 CM                                                                     |                    | TOLERANCES:                                                                                                                                                              |                      | CABLE LENGTH (L) TOLERANCES:                                                                                                                                                                                                                                    |  |
|                                                                                                                                          |                    | <div><div><div>.X = ±.2 [ .51 ]</div><div>XX = ±.02 [ .51 ]</div><div>.XXX = ±.005 [ .13 ]</div></div><div><div>FRACTIONS ± 1/32</div><div>ANGLES ± 1°</div></div></div> |                      | <div><div>L ≤ 12 [305] = +1 [25] / -0</div><div>12 [305] &lt; L ≤ 60 [1524] = +2 [51] / -0</div><div>60 [1524] &lt; L ≤ 120 [3048] = +4 [102] / -0</div><div>120 [3048] &lt; L ≤ 300 [7620] = +6 [152] / -0</div><div>300 [7620] &lt; L = +5%L / -0</div></div> |  |
|                                                                                                                                          |                    | ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.                                                                                                                             |                      |                                                                                                                                                                                                                                                                 |  |
|                                                                                                                                          |                    | SCALE<br>N/A                                                                                                                                                             |                      |                                                                                                                                                                                                                                                                 |  |
| SIZE<br>A                                                                                                                                | CAGE CODE<br>3FKR5 | DRAWN BY<br>K.DANG                                                                                                                                                       | ITEM NO.<br>FMC00318 | REV<br>A                                                                                                                                                                                                                                                        |  |

T-Rev.D