

## Low Loss RA SMA Male to SMA Female Bulkhead Cable LMR-100 Coax in 12 Inch

The RA SMA male to SMA female bulkhead 12 inch cable using LMR-100 coax, part number FMC00206-12, 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 FMC00206-12 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]   |       | $\Omega$ /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             | 0.1  | 0.25 | 0.5 | 1    | 3    | GHz   |
| Insertion Loss (Max.) | 0.36 | 0.37 | 0.4 | 0.45 | 0.65 | 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*  | 12 in [304.8 mm] |
| 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

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                            | 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 |
|-----------------|------------------|

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

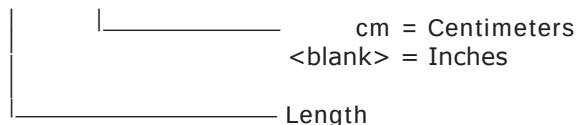
## Notes:

- 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

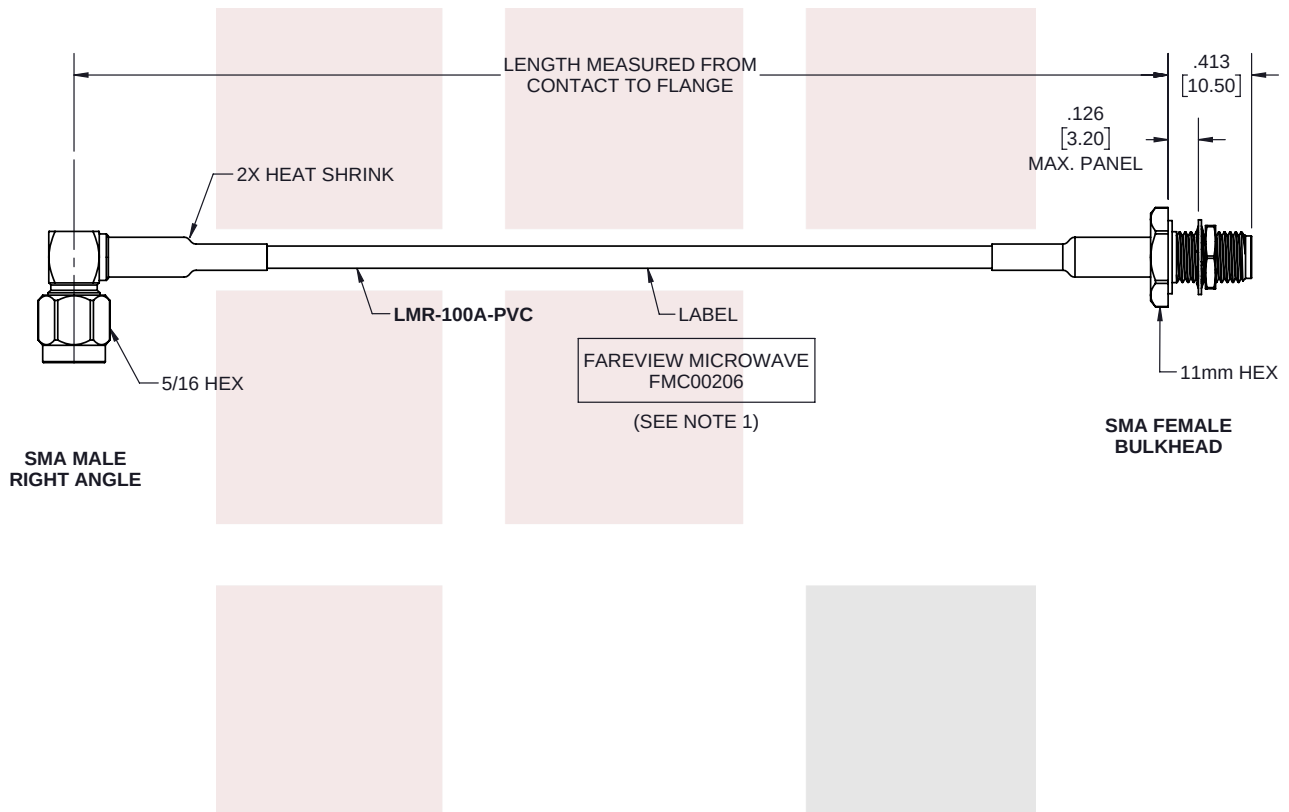
Low Loss RA SMA Male to SMA Female Bulkhead Cable LMR-100 Coax in 12 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss RA SMA Male to SMA Female Bulkhead Cable LMR-100 Coax in 12 Inch FMC00206-12](https://www.fairviewmicrowave.com/low-loss-ra-sma-male-sma-female-cable-lmr100-coax-fmc00206-12-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-loss-ra-sma-male-sma-female-cable-lmr100-coax-fmc00206-12-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.

| REVISIONS |                 |          |          |
|-----------|-----------------|----------|----------|
| REV.      | DESCRIPTION     | DATE     | APPROVED |
| A         | INITIAL RELEASE | 09/10/20 | SELLIS   |



**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.

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT  
ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

|                                                                                      |  |                                                                                                       |  |                                                                                                                                            |  |
|--------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p><b>Fairview Microwave</b><br/>an INFINIT<sup>®</sup> brand</p>                    |  | <p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES<br/>DIMENSIONS IN [ ] ARE MILLIMETERS</p> |  | <p>THIRD-ANGLE PROJECTION</p>                                                                                                              |  |
| <p>TITLE</p>                                                                         |  | <p>TOLERANCES:</p>                                                                                    |  | <p>THE INFORMATION AND<br/>DESIGN IN THIS DOCUMENT<br/>IS THE PROPERTY OF<br/>FAIRVIEW MICROWAVE CORPORATION.<br/>ALL RIGHTS RESERVED.</p> |  |
| <p>Low Loss RA SMA Male to SMA Female Bulkhead Cable<br/>LMR-100 Coax in 12 Inch</p> |  | <p>CABLE LENGTH (L) TOLERANCES:</p>                                                                   |  | <p>SHEET 1 OF 1</p>                                                                                                                        |  |
| <p>SIZE A</p>                                                                        |  | <p>CAGE CODE 3FKR5</p>                                                                                |  | <p>SCALE N/A</p>                                                                                                                           |  |
| <p>DRAWN BY BPUCHASKI</p>                                                            |  | <p>ITEM NO. FMC00206</p>                                                                              |  | <p>REV A</p>                                                                                                                               |  |

T-Rev.D