

## RA SMA Male to BNC Male Cable LMR-240-UF Coax in 100 cm

The RA SMA male to BNC male 100 cm cable using LMR-240-UF coax, part number FMC00410-100CM, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to BNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00410-100CM SMA male to BNC male cable assembly operates to 4 GHz. The right angle SMA interface on the LMR-240-UF 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  |              | 4     | GHz                              |
| VSWR                          |     |              | 1.4:1 |                                  |
| Velocity of Propagation       |     | 84           |       | %                                |
| RF Shielding                  | 90  |              |       | dB                               |
| Group Delay                   |     | 1.21 [3.97]  |       | ns/ft [ns/m]                     |
| Capacitance                   |     | 24.2 [79.4]  |       | pF/ft [pF/m]                     |
| Inductance                    |     | 0.06 [0.2]   |       | uH/ft [uH/m]                     |
| DC Resistance Inner Conductor |     | 4.28 [14.04] |       | $\Omega$ /1000ft [ $\Omega$ /Km] |
| DC Resistance Outer Conductor |     | 3.89 [12.76] |       | $\Omega$ /1000ft [ $\Omega$ /Km] |
| Jacket Spark                  |     |              | 5,000 | Vrms                             |

### Performance by Frequency

| Description           | F1   | F2   | F3   | F4  | F5   | Units |
|-----------------------|------|------|------|-----|------|-------|
| Frequency             | 0.1  | 0.25 | 0.5  | 1   | 4    | GHz   |
| Insertion Loss (Max.) | 0.37 | 0.4  | 0.43 | 0.5 | 0.86 | 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 BNC Male connector.

### Mechanical Specifications

#### Cable Assembly

Length\* 39.37 in [100 cm]  
 Diameter 0.58 in [14.73 mm]

#### Cable

Cable Type LMR-240-UF



### Configuration:

- SMA Male Right Angle
- BNC Male
- LMR-240-UF

### Features:

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- TPE 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)

|                                      |                        |
|--------------------------------------|------------------------|
| Impedance                            | 50 Ohms                |
| Inner Conductor Type                 | Stranded               |
| Inner Conductor Material and Plating | Copper                 |
| Dielectric Type                      | PE (F)                 |
| Number of Shields                    | 2                      |
| Shield Layer 1                       | Aluminum Tape          |
| Shield Layer 2                       | Tinned Copper Braid    |
| Jacket Material                      | TPE, Black             |
| Jacket Diameter                      | 0.24 in [6.1 mm]       |
| One Time Minimum Bend Radius         | 0.75 in [19.05 mm]     |
| Repeated Minimum Bend Radius         | 2.5 in [63.5 mm]       |
| Bending Moment                       | 0.13 lbs-ft [0.18 N-m] |
| Flat Plate Crush                     | 13 lbs/in [0.23 Kg/mm] |
| Tensile Strength                     | 80 lbs [36.29 Kg]      |

### Connectors

| Description                     | Connector 1           | Connector 2      |
|---------------------------------|-----------------------|------------------|
| Type                            | SMA Male              | BNC Male         |
| Specification                   | MIL-STD-348           |                  |
| Impedance                       | 50 Ohms               | 50 Ohms          |
| Contact Material & Plating      | Phosphor Bronze, Gold | Brass, Gold      |
| Contact Plating Spec.           | ASTM B488             |                  |
| Dielectric Type                 | Teflon                | PTFE             |
| Outer Cond Material & Plating   |                       | Brass, Tri-Metal |
| Body Material & Plating         | Brass, Tri-Metal      | Brass, Tri-Metal |
| Coupling Nut Material & Plating | Brass, Tri-Metal      |                  |
| Hex Size                        | 5/16 inch             |                  |

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

### Plotted and Other Data

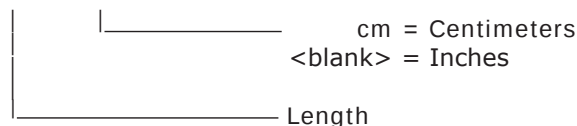
Notes:

- Values at 25°C, sea level.

### How to Order

Part Number Configuration:

**FMC00410 - xx uu**



Example: FMC00410-12 = 12 inches long cable  
 FMC00410-100cm = 100 cm long cable

RA SMA Male to BNC Male Cable LMR-240-UF Coax in 100 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.

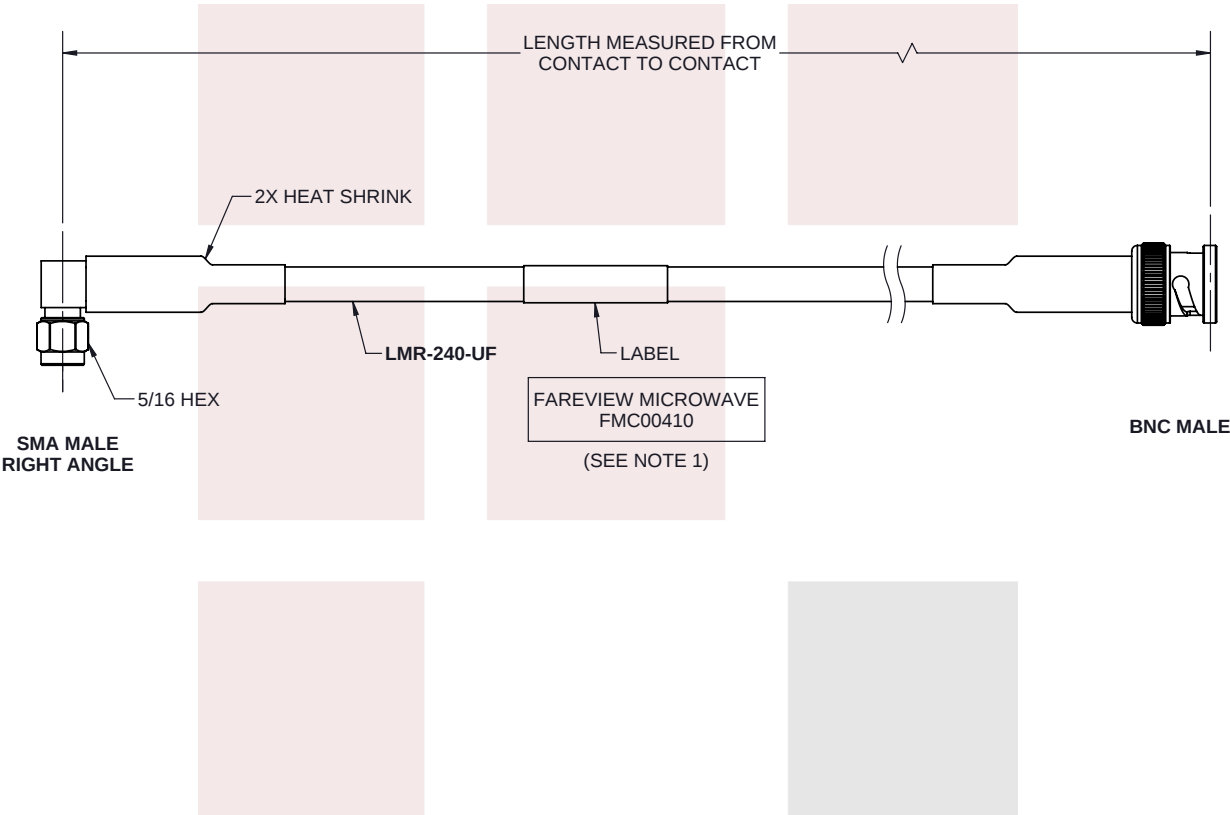
Click the following link to obtain additional part information: [RA SMA Male to BNC Male Cable LMR-240-UF Coax in 100 cm FMC00410-100CM](https://www.fairviewmicrowave.com/ra-sma-male-bnc-male-cable-lmr240uf-coax-fmc00410-100cm-p.aspx)

URL: <https://www.fairviewmicrowave.com/ra-sma-male-bnc-male-cable-lmr240uf-coax-fmc00410-100cm-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 | 09/14/2020 | 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.

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| <div><div><div></div><div></div><div></div><div></div></div><div><div>Fairview Microwave</div><div>an INFINITE brand</div></div></div> |           | UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES<br>DIMENSIONS IN [ ] ARE MILLIMETERS |          | THIRD-ANGLE PROJECTION<br><br>THE INFORMATION AND<br>DESIGN IN THIS DOCUMENT<br>IS THE PROPERTY OF<br>FAIRVIEW MICROWAVE CORPORATION.<br>ALL RIGHTS RESERVED. |  |
| TITLE                                                                                                                                  |           | TOLERANCES:                                                                                   |          | CABLE LENGTH (L) TOLERANCES:                                                                                                                                                                                                                       |  |
| RA SMA Male to BNC Male Cable LMR-240-UF Coax in<br>100 cm                                                                             |           | .X = ±.2 [ .51 ]    FRACTIONS    L ≤ 12 [305] = +1 [25] / -0                                  |          | 12 [305] < L ≤ 60 [1524] = +2 [51] / -0                                                                                                                                                                                                            |  |
|                                                                                                                                        |           | .XX = ±.02 [ .51 ]    ± 1/32    60 [1524] < L ≤ 120 [3048] = +4 [102] / -0                    |          | 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0                                                                                                                                                                                                        |  |
|                                                                                                                                        |           | .XXX = ±.005 [ .13 ]    ANGLES ± 1°    300 [7620] < L = +5%L / -0                             |          |                                                                                                                                                                                                                                                    |  |
|                                                                                                                                        |           | ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.                                                  |          | SCALE                                                                                                                                                                                                                                              |  |
|                                                                                                                                        |           |                                                                                               |          | N/A                                                                                                                                                                                                                                                |  |
| SIZE                                                                                                                                   | CAGE CODE | DRAWN BY                                                                                      | ITEM NO. | REV                                                                                                                                                                                                                                                |  |
| A                                                                                                                                      | 3FKR5     | BPUCHASKI                                                                                     | FMC00410 | A                                                                                                                                                                                                                                                  |  |

T-Rev.D