

## Low Loss N Male to BNC Male Cable LMR-240-UF Coax

The type N male to BNC male cable using LMR-240-UF coax, part number FMC00319, from Fairview Microwave is in-stock and ships same day. This Fairview type N 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 FMC00319 type N male to BNC male cable assembly operates to 5.8 GHz. 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       |     | 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             | 0.25 | 0.5  | 1    | 2.5  | 5.8  | GHz   |
| Insertion Loss (Typ.) | 0.04 | 0.06 | 0.09 | 0.15 | 0.24 | dB/ft |
|                       | 0.13 | 0.2  | 0.3  | 0.49 | 0.79 | dB/m  |

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector

### Mechanical Specifications

#### Cable Assembly

Diameter 0.827 in [21.01 mm]

#### Cable

Cable Type LMR-240-UF  
 Impedance 50 Ohms  
 Inner Conductor Type Stranded



### Configuration:

- N Male
- BNC Male
- LMR-240-UF

### Features:

- Max Frequency 5.8 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)

|                                      |                        |
|--------------------------------------|------------------------|
| 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                            | N Male                | BNC Male         |
| Impedance                       | 50 Ohms               | 50 Ohms          |
| Contact Material & Plating      | Phosphor Bronze, Gold | Brass, Gold      |
| Dielectric Type                 | PTFE                  | PTFE             |
| Outer Cond Material & Plating   |                       | Brass, Tri-Metal |
| Body Material & Plating         | Brass, Nickel         | Brass, Tri-Metal |
| Coupling Nut Material & Plating | Brass, Nickel         |                  |

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)

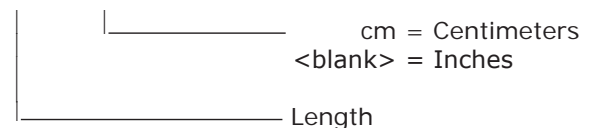
**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMC00319 - xx uu**



Example: FMC00319-12 = 12 inches long cable  
FMC00319-100cm = 100 cm long cable

Low Loss N Male to BNC Male Cable LMR-240-UF Coax 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.

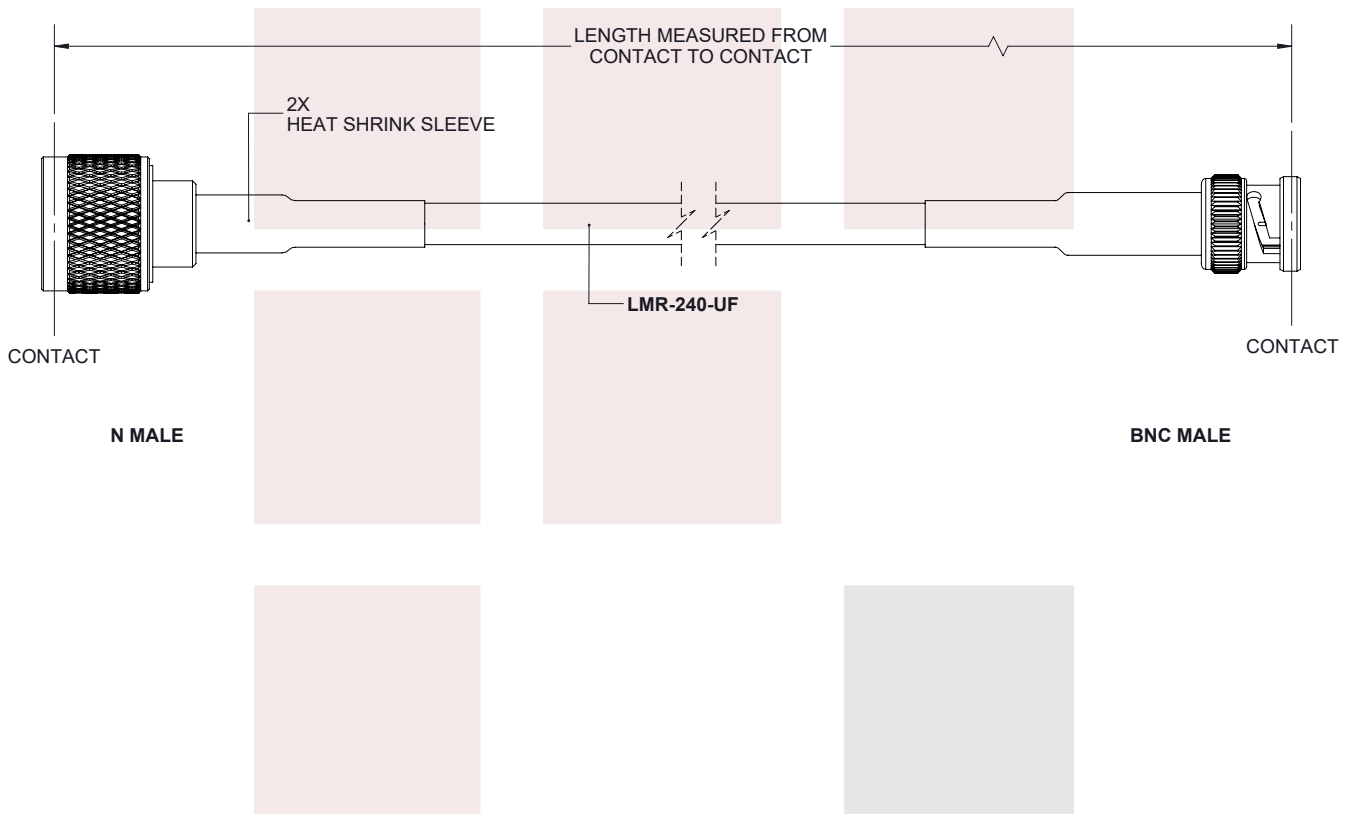
Click the following link to obtain additional part information: [Low Loss N Male to BNC Male Cable LMR-240-UF Coax FMC00319](#)

URL: <https://www.fairviewmicrowave.com/n-male-bnc-male-cable-lmr240uf-coax-fmc00319-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 | 2/21/2020 | S.ELLIS  |



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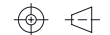
TITLE  
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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

|                      |                  |   |
|----------------------|------------------|---|
| .X = ±.2 [ .508 ]    | FRACTIONS ± 1/32 | L ≤ 12 [ 305 ] = +1 [ 25 ] / -0                   |
| .XX = ±.02 [ .51 ]   | ANGLES ± 1°      | 12 [ 305 ] < L ≤ 60 [ 1524 ] = +2 [ 51 ] / -0     |
| .XXX = ±.005 [ .13 ] |                  | 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<br>A | CAGE CODE<br>3FKR5 | DRAWN BY<br>K.DANG | ITEM NO.<br>FMC00319 | REV<br>A |
|-----------|--------------------|--------------------|----------------------|----------|

T-Rev.D