

# Low Loss N Female Bulkhead to SMA Male Cable LL160 Coax in 50 CM

The N Female Bulkhead to SMA Male low loss cable using LL160 coax, part number FMCA1714-50CM, from Fairview Microwave is in-stock and ships same day. This N to SMA low loss cable assembly features a 82.5% velocity dielectric manufactured from expanded PTFE tape. This microporous dielectric contributes to the low loss and phase stability of the cables. Our triple shielded coaxial cable construction of Fairview's low loss LL160 provides shielding levels as high as 95 dB. The precision connections are constructed with stainless steel bodies and high temperature insulators, supporting a wide range of temperature from -55 to +165 degrees C. This solid combination of connectors and low loss coax are further enhanced with the addition of heavy-duty heat shrink for improved strain relief for this superior quality RF cable assembly.

Fairview's N Female Bulkhead to SMA Male low loss cable FMCA1714-50CM datasheet, specifications and outline drawing are shown in this PDF below. Our extensive offering of RF, microwave and high speed digital connections allows designers to configure and customize their signals however they like. From reducing losses or improving phase stability, Fairview microwave has the right low loss cable solutions to meet your needs.

## **Electrical Specifications**

| Description             | Min | Т     | ур    | Max    | U     | nits     |
|-------------------------|-----|-------|-------|--------|-------|----------|
| Frequency Range         | DC  |       |       | 18     |       | GHz      |
| VSWR                    |     |       |       | 1.35:1 |       |          |
| Velocity of Propagation |     | 82    | 2.5   |        |       | %        |
| RF Shielding            | -90 |       |       |        |       | dB       |
| Capacitance             |     | 25 [8 | 32.02 | ]      | pF/ft | : [pF/m] |
|                         |     |       |       |        |       |          |

#### Performance by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 1    | 2    | 4.5  | 9    | 18   | GHz   |
| Insertion Loss (Typ.) | 0.24 | 0.35 | 0.53 | 0.76 | 1.09 | dB    |

**Electrical Specification Notes:** 

The Insertion Loss data above is based on the performance specifications of the coax cable used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.04\*SQRT(F(GHz))dB maximum per connector.

## **Mechanical Specifications**

Cable Assembly Length\*

#### Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 19.69 in [500.13 mm]

LL160 50 Ohms Solid Copper, Silver PTFE 3 Silver Plated Copper



FMCA1714-50CM

**DATA SHEET** 

## **Configuration:**

- N Female Bulkhead
- SMA Male
- LL160

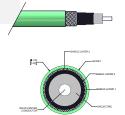
## **Features:**

- Max Frequency 18 GHz
- Shielding Effectivity > -90 dB
- 82.5% Phase Velocity
- Triple Shielded
- FEP Jacket
- Low VSWR of 1.35:1 to 18 GHz
- -55 to +150 Temperature Range
- Expanded PTFE Tape Dielectric
- Same Day Shipment of Custom Lengths

## **Applications:**

- General Purpose
- Laboratory Use
- Automated Test Systems
- Military Electronics
- Phased Array Antennas
- RF Countermeasures

## **Cable Diagram:**



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 sales@fairviewmicrowave.com Fairview Microwave

## an INFINIT<sup>B</sup> brand



Repeated Minimum Bend Radius

0.8 in [20.32 mm]

#### Connectors

| Description                  | Connector 1                   | Connector 2                |  |
|------------------------------|-------------------------------|----------------------------|--|
| Туре                         | N Female                      | SMA Male                   |  |
| Mount Method                 | Bulkhead                      |                            |  |
| Impedance                    | 50 Ohms                       | 50 Ohms                    |  |
| Contact Material & Plating   | Beryllium Copper, Gold        | Beryllium Copper, Gold     |  |
| Contact Plating Spec.        | ASTM-B488                     | ASTM-B488                  |  |
| Dielectric Type              | PTFE                          | PTFE                       |  |
| Outer Cond Material & Platin | ng Passivated Stainless Steel |                            |  |
| Body Material & Plating      | Passivated Stainless Steel    | Passivated Stainless Steel |  |
| Coupling Nut Material & Plat | ting                          | Passivated Stainless Steel |  |
|                              |                               |                            |  |

## **Environmental Specifications**

Temperature Operating Range

-55 to +165 deg C

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

## Plotted and Other Data

Notes:

### **How to Order**

Part Number Configuration:

FMCA1714 - xx

uu

— cm = Centimeters <blank> = Inches

——— Length

Example: FMCA1714-12 = 12 inches long cable FMCA1714-100cm = 100 cm long cable

301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689

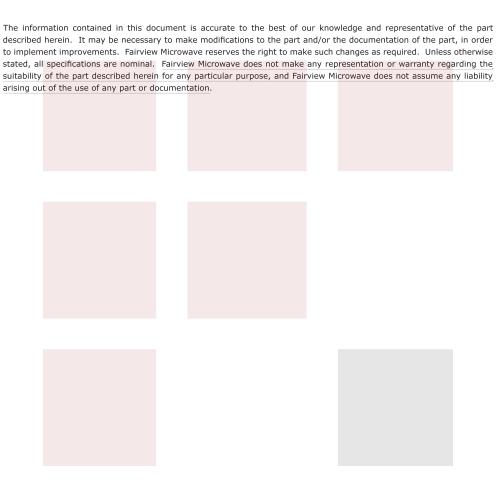


## FMCA1714-50CM DATA SHEET

Low Loss N Female Bulkhead to SMA Male Cable LL160 Coax in 50 CM from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

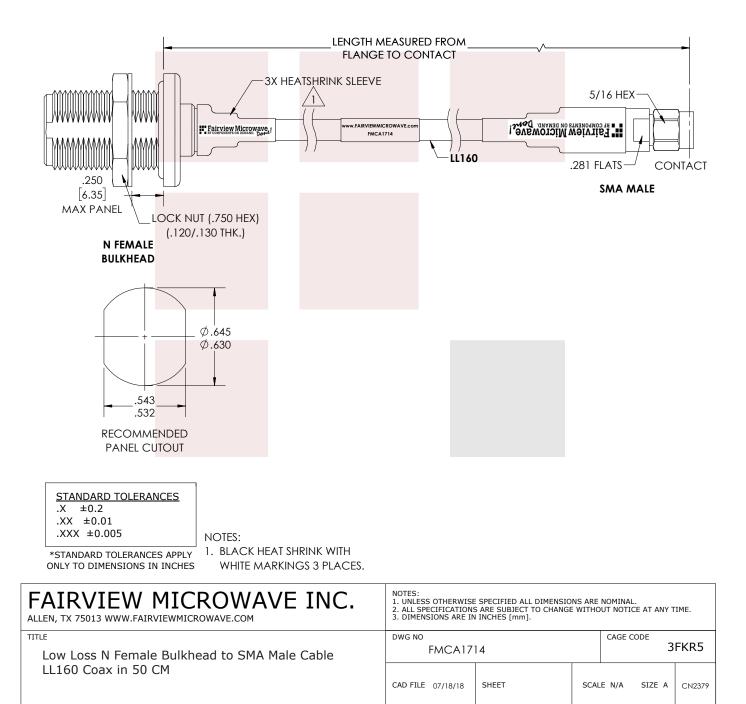
Click the following link to obtain additional part information: Low Loss N Female Bulkhead to SMA Male Cable LL160 Coax in 50 CM FMCA1714-50CM

URL: https://www.fairviewmicrowave.com/low-loss-n-female-sma-male-cable-ll160-coax-fmca1714-50cm-p.aspx



301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689





FMCA1714-50CM DATA SHEET

301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689