

# FMC00496 DATA SHEET

## Low Loss SMA Male to N Female Bulkhead Cable LMR-240-UF Coax with Times Microwave Components

The SMA male to type N female bulkhead cable using LMR-240-UF coax, part number FMC00496, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to type N cable assembly has a male to female 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 FMC00496 SMA male to type N female cable assembly operates to 5.8 GHz. Our RF cable assembly with type N 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     | Т            | ур      | Max             | ι     | Jnits      |
|-------------------------------|---------|--------------|---------|-----------------|-------|------------|
| Frequency Range               | DC      |              |         | 5.8             |       | GHz        |
| VSWR                          |         |              |         | 1.4:1           |       |            |
| Velocity of Propagation       |         | 8            | 34      |                 |       | %          |
| RF Shielding                  | 90      |              |         |                 |       | dB         |
| Group Delay                   |         | 1.21         | [3.97]  |                 | ns/f  | t [ns/m]   |
| Capacitance                   |         | 24.2         | [79.4]  |                 | pF/f  | t [pF/m]   |
| Inductance                    |         | 0.06         | [0.2]   |                 | uH/f  | t [uH/m]   |
| DC Resistance Inner Conductor |         | 4.28 [14.04] |         | Ω/1000ft [Ω/Km] |       |            |
| DC Resistance Outer Cor       | nductor | 3.89         | [12.76] |                 | Ω/100 | Oft [Ω/Km] |
| Jacket Spark                  |         |              |         | 5,000           | \     | /rms       |

#### **Performance by Frequency**

| Description           | F1    | F2    | F3    | F4    | F5    | Units |
|-----------------------|-------|-------|-------|-------|-------|-------|
| Frequency             | 0.25  | 0.5   | 1     | 2.5   | 5.8   | GHz   |
| Insertion Loss (Typ.) | 0.046 | 0.066 | 0.095 | 0.155 | 0.244 | dB/ft |
|                       | 0.15  | 0.22  | 0.31  | 0.51  | 0.8   | 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** 

Weight 0.14 lbs [63.5 g]

Cable

Cable Type LMR-240-UF



## **Configuration:**

- SMA Male
- N Female Bulkhead
- 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

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Impedance 50 Ohms
Inner Conductor Type Stranded
Inner Conductor Material and Plating Copper
Dielectric Type PE (F)

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    |             | Connecto      | r 2      |   |
|--|----------------------|------|-------------|---------------|----------|---|
| Туре   | SMA Male             |      | N Female    |               |          |   |
| Mount Method Bulkhead  |                      |      |             |               | d        |   |
| Specification  | MIL-STD-348          |      | MIL-STD-348 |               |          |   |
| Impedance  | 50 Ohms              |      |             | 50 Ohms       | S        |   |
| Contact Material & Plating   | Beryllium Coppe      | r, G | old Be      | ryllium Coppe | er, Gold | t |
| Contact Plating Spec.  | ASTM B488            |      | 50 µinches  |               |          |   |
| Dielectric Type  | PTFE                 | PTFE |             |               |          |   |
| Outer Cond Material & Plating Passivated Stainless Steel, Gold Brass, Tri-Meta |                      |      |             |               | etal     |   |
| Outer Cond Plating Spec.   |                      |      |             | 80 µinche     | es       |   |
| Body Material & Plating  | Passivated Stainless | Stee | el, Gold    | Brass, Tri-M  | etal     |   |
| Body Plating Spec. SAE-AMS-2700  |                      |      |             |               |          |   |
| Coupling Nut Material & Plating Passivated Stainless Steel                     |                      |      |             |               |          |   |
| Coupling Nut Plating Spec.   | SAE-AMS-27           | 00   |             |               |          |   |
|  |                      |      |             |               |          |   |

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

#### **Plotted and Other Data**

Notes:

#### **How to Order**

Example: FMC00496-12 = 12 inches long cable

FMC00496-100cm = 100 cm long cable





Low Loss SMA Male to N Female Bulkhead Cable LMR-240-UF Coax with Times Microwave Components 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 SMA Male to N Female Bulkhead Cable LMR-240-UF Coax with Times Microwave Components FMC00496

URL: https://www.fairviewmicrowave.com/low-loss-sma-male-to-n-female-bulkhead-cable-lmr-240-uf-coax-with-times-microwave-components-fmc00496-p.aspx







