an INFINIT[®] brand

FMC00417 DATA SHEET

RA N Male to RA N Male Cable LMR-400 Coax

The RA type N male to RA type N male cable using LMR-400 coax, part number FMC00417, from Fairview Microwave is in-stock and ships same day. This Fairview type N to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00417 type N male to type N male cable assembly operates to 3 GHz. The right angle type N interfaces on the LMR-400 cable allow 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 | Т | ур | Max | ι | Inits |
|-------------------------|---------|------|---------|-------|-------|------------|
| Frequency Range | DC | | | 3 | | GHz |
| VSWR | | | | 1.4:1 | | |
| Velocity of Propagation | | 8 | 35 | | | % |
| RF Shielding | 90 | | | | | dB |
| Group Delay | | 1.2 | [3.94] | | ns/f | t [ns/m] |
| Capacitance | | 23.9 | [78.41] | | pF/f | t [pF/m] |
| Inductance | | 0.06 | 6 [0.2] | | uH/f | t [uH/m] |
| DC Resistance Inner Cor | ductor | 1.39 | [4.56] | | Ω/100 | 0ft [Ω/Km] |
| DC Resistance Outer Cor | nductor | 1.65 | [5.41] | | Ω/100 | 0ft [Ω/Km] |
| Jacket Spark | | | | 8,000 | ١ | /rms |

Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency | 0.1 | 0.25 | 0.5 | 1 | 3 | GHz |
| Insertion Loss (Max.) | 0.01 | 0.01 | 0.02 | 0.03 | 0.08 | dB/ft |
| | 0.03 | 0.03 | 0.07 | 0.1 | 0.26 | dB/m |

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB per connector.

Mechanical Specifications

Cable Assembly Diameter

0.8 in [20.32 mm]

Cable Cable Type Impedance

LMR-400 50 Ohms



Configuration:

- N Male Right Angle
- N Male Right Angle
- LMR-400

Features:

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket
- 500 Mating Cycles

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 sales@fairviewmicrowave.com





| Inner Conductor Type |
|--------------------------------------|
| Inner Conductor Material and Plating |
| Dielectric Type |
| Number of Shields |
| Shield Layer 1 |
| Shield Layer 2 |
| Jacket Material |
| Jacket Diameter |
| |
| |

One Time Minimum Bend Radius Repeated Minimum Bend Radius Bending Moment Flat Plate Crush Tensile Strength PE (F) 2 Aluminum Tape Tinned Copper Braid PE, Black 0.405 in [10.29 mm] 1 in [25.4 mm] 4 in [101.6 mm] 0.5 lbs-ft [0.68 N-m] 40 lbs/in [0.71 Kg/mm]

160 lbs [72.57 Kg]

Copper Clad Aluminum

Solid

Connectors

| Description | Connector 1 | Connector 2 | |
|-----------------------------|-----------------------|-----------------------------------|--|
| Туре | N Male | N Male | |
| Impedance | 50 Ohms | 50 Ohms | |
| Mating Cycles | 500 | 500 | |
| Contact Material & Plating | Brass, Gold | Brass, Gold | |
| Dielectric Type | Teflon | Teflon | |
| Body Material & Plating | Brass, Tri-Metal | Brass, Tri-Metal | |
| Coupling Nut Material & Pla | ting Brass, Tri-Metal | Brass, Tri-Metal | |
| Hex Size | 13/16 inch | 13/16 inch | |
| Torque | 30 in-lbs 3.39 Nr | n 30 in-lbs 3.3 <mark>9 Nm</mark> | |
| | | | |

Environmental Specifications

Temperature Operating Range

-40 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

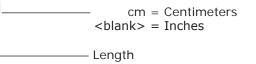
Notes:

• Values at 25°C, sea level.

How to Order

Part Number Configuration:

FMC00417 - xx



Example: FMC00417-12 = 12 inches long cable FMC00417-100cm = 100 cm long cable

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RA N Male to RA N Male Cable LMR-400 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.

The information contained in this document is accurate to the best of our knowledge and representative of the part

Click the following link to obtain additional part information: RA N Male to RA N Male Cable LMR-400 Coax FMC00417

URL: https://www.fairviewmicrowave.com/ra-n-male-ra-n-male-cable-Imr400-coax-fmc00417-p.aspx

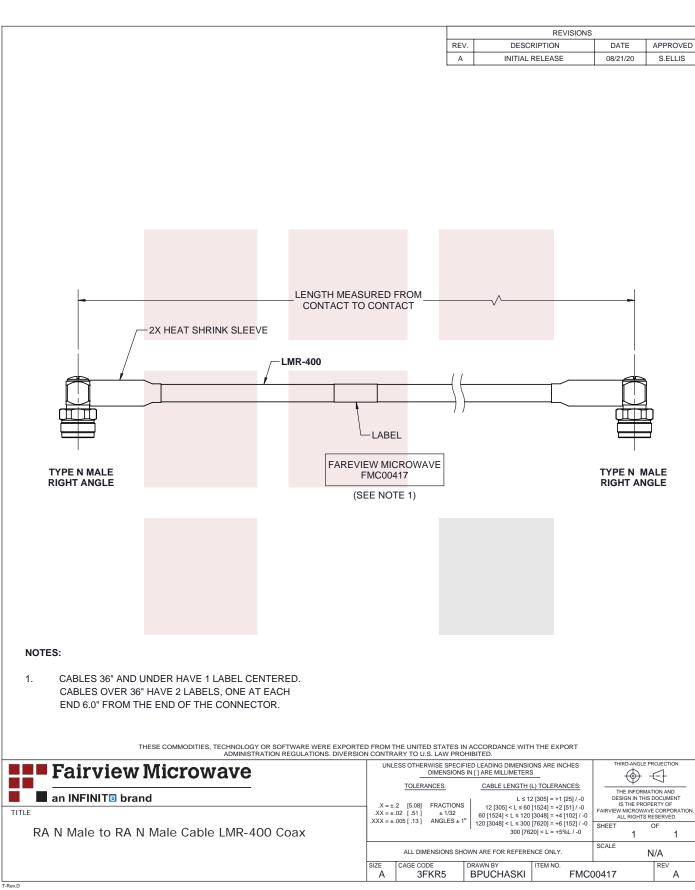
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