

Low Loss SMA Male to RA N Male Cable LMR-400-DB Coax With Times Microwave Components

FMC00116



Configuration

- Connector 1: SMA Male
- Connector 2: N Male Right Angle
- Cable Type: LMR-400-DB
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket

Applications

- General Purpose
- Laboratory Use

Description

The SMA male to RA type N male cable using LMR-400-DB coax, part number FMC00116, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400-DB coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00116 SMA male to type N male cable assembly operates to 6 GHz. The right angle type N interface on the LMR-400-DB 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	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Group Delay		1.2 [3.94]		ns/ft [ns/m]
Capacitance		23.9 [78.41]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		1.39 [4.56]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			8,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	5800	MHz	
FMC00116	Custom Lengths Available	Insertion Loss (Typ.)	0.02	0.03	0.041	0.068	0.108	dB/ft	
			0.07	0.1	0.14	0.23	0.36	dB/m	
FMC00116-12	12 inch	Insertion Loss (Typ.)	0.32	0.33	0.35	0.37	0.41	dB	0.315
FMC00116-24	24 inch	Insertion Loss (Typ.)	0.34	0.36	0.39	0.44	0.52	dB	0.386
FMC00116-36	36 inch	Insertion Loss (Typ.)	0.36	0.39	0.43	0.51	0.63	dB	0.456
FMC00116-48	48 inch	Insertion Loss (Typ.)	0.38	0.42	0.47	0.58	0.74	dB	0.526
FMC00116-60	60 inch	Insertion Loss (Typ.)	0.4	0.44	0.51	0.64	0.84	dB	0.596

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.1 dB

Loss due to Connector 2: 0.2 dB

Base Weight: 0.315 pounds

Additional Weight per Inch: 0.00584 pounds

Mechanical Specifications

Cable Assembly

Weight 0.315 lbs [142.88 g]

Cable

Cable Type LMR-400-DB
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper Clad Aluminum
 Dielectric Type PE (F)
 Number of Shields 2
 Shield Layer 1 Aluminum Tape
 Shield Layer 2 Tinned Copper Braid
 Jacket Material PE, Black
 Jacket Diameter 0.405 in [10.29 mm]
 One Time Minimum Bend Radius 1 in [25.4 mm]
 Repeated Minimum Bend Radius 4 in [101.6 mm]
 Bending Moment 0.5 lbs-ft [0.68 N-m]
 Flat Plate Crush 40 lbs/in [0.71 Kg/mm]
 Tensile Strength 160 lbs [72.57 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	N Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	50µin Minimum	50µin Minimum
Dielectric Type	Teflon	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification		78.74 µin minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification		78.74 µin minimum
Torque		44 in-lbs 4.97 Nm

Environmental Specifications

Operating Range Temperature-40 to +85 deg C

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

Plotted and Other Data

Notes:

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FMC00116

Typical Performance Data

How to Order

Part Number Configuration: **FMC00116 - xx uu**

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length

Base Number

Example: FMC00116-12 = 12 inches long cable
FMC00116-100cm = 100 cm long cable

Low Loss SMA Male to RA N Male Cable LMR-400-DB Coax With Times Microwave Components from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Low Loss SMA Male to RA N Male Cable LMR-400-DB Coax With Times Microwave Components FMC00116](https://www.fairviewmicrowave.com/low-loss-sma-male-to-ra-n-male-cable-lmr-400-db-coax-with-times-microwave-components-fmc00116)

URL: <https://www.fairviewmicrowave.com/low-loss-sma-male-to-ra-n-male-cable-lmr-400-db-coax-with-times-microwave-components-fmc00116-p.aspx>

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FMC00116 CAD Drawing
Low Loss SMA Male to RA N Male Cable LMR-400-DB Coax With Times Microwave Components

