

## Non-Magnetic BNC Female Bulkhead to BNC Female Bulkhead Cable FM-141FL-NM Coax



### FMCA100380

#### Configuration

- Connector 1: BNC Female Bulkhead
- Connector 2: BNC Female Bulkhead
- Cable Type: FM-141FL-NM
- Coax Flex Type: Formable

#### Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 70% Phase Velocity
- Copper Jacket
- 500 Mating Cycles

#### Applications

- General Purpose
- Laboratory Use

#### Description

The BNC female bulkhead to BNC female bulkhead cable using FM-141FL-NM coax, part number FMCA100380, from Fairview Microwave is in-stock and ships same day. This Fairview BNC to BNC cable assembly has a female to female gender configuration with 50 ohm formable FM-141FL-NM coax. Fairview Microwave's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable. The FMCA100380 BNC female to BNC female cable assembly operates to 4 GHz. Our RF cable assembly with BNC 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.

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		4	GHz
VSWR			1.4:1	
Velocity of Propagation		70		%
RF Shielding	90			dB
Operating Voltage (AC)			500	Vrms

#### Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
		Frequency	500	1000	2500	4000	MHz	
FMCA100380	Custom Lengths Available	Insertion Loss (Typ.)	0.112	0.162	0.248	0.334	dB/ft	
			0.37	0.54	0.82	1.1	dB/m	
FMCA100380-6	6 inch	Insertion Loss (Typ.)	0.46	0.49	0.53	0.57	dB	0.787
FMCA100380-12	12 inch	Insertion Loss (Typ.)	0.52	0.57	0.65	0.74	dB	1.447
FMCA100380-24	24 inch	Insertion Loss (Typ.)	0.63	0.73	0.9	1.07	dB	2.767
FMCA100380-36	36 inch	Insertion Loss (Typ.)	0.74	0.89	1.15	1.41	dB	4.087
FMCA100380-60	60 inch	Insertion Loss (Typ.)	0.96	1.21	1.64	2.07	dB	6.727

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:	0.2 dB
Loss due to Connector 2:	0.2 dB
Base Weight:	1.447 pounds
Additional Weight per Inch:	0.11 pounds

### Mechanical Specifications

#### Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	1.447 lbs [656.35 g]

#### Cable

Cable Type	FM-141FL-NM
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Silver Plated Copper
Dielectric Type	PTFE
Number of Shields	1
Outer Conductor 1 Material and Plating	Copper-Tin Composite
Jacket Material	Copper
Repeated Minimum Bend Radius	0.375 in [9.53 mm]

### Connectors

Description	Connector 1	Connector 2
Type	BNC Female Bulkhead	BNC Female Bulkhead
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
Contact Material and Plating	Beryllium Copper, Gold over Copper	Beryllium Copper, Gold over Copper
Body Material and Plating	BZ4, Copper-Tin-Zinc Alloy	BZ4, Copper-Tin-Zinc Alloy

### Environmental Specifications

Operating Range Temperature	-55 to +165 deg C
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**Compliance Certifications** (see [product page](#) for current document)

#### Plotted and Other Data

Notes:

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**FMCA100380**

- **xx**

**uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches  
Length  
Base Number

Example: FMCA100380-12 = 12 inches long cable  
FMCA100380-100cm = 100 cm long cable

Non-Magnetic BNC Female Bulkhead to BNC Female Bulkhead Cable FM-141FL-NM Coax 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: [Non-Magnetic BNC Female Bulkhead to BNC Female Bulkhead Cable FM-141FL-NM Coax FMCA100380](#)

URL: <https://www.fairviewmicrowave.com/non-magnetic-bnc-female-bulkhead-to-bnc-female-bulkhead-cable-fm-141fl-nm-coax-fmca100380-p.aspx>

The information contained within 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 liability arising out of the use of any part or document.



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