

BNC Male to BNC Female Bulkhead Cable RG-316 Coax

FMCA10010

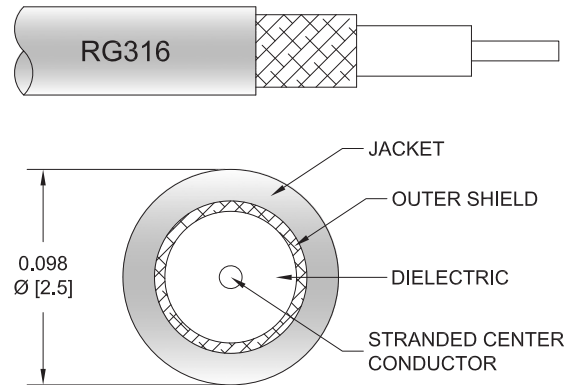


Configuration

- Connector 1: BNC Male
- Connector 2: BNC Female Bulkhead
- Cable Type: RG-316
- Coax Cable Group: 8
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- 69% Phase Velocity
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

The BNC male to BNC female bulkhead cable using RG-316 coax, part number FMCA10010, from Fairview Microwave is in-stock and ships same day. This Fairview BNC to BNC cable assembly has a male to female gender configuration with 50 ohm flexible RG-316 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA10010 BNC male to BNC female cable assembly operates to 3 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		3	GHz
VSWR			1.4:1	
Velocity of Propagation		69		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			335	Vrms
Jacket Spark			2,000	Vrms

Specifications by Frequency

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FMCA10010

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
FMCA10010	Custom Lengths Available	Insertion Loss (Typ.)	0.11	0.16	0.238	0.38	0.58	dB/ft	
			0.37	0.53	0.79	1.25	1.91	dB/m	
FMCA10010-12	12 inch	Insertion Loss (Typ.)	0.31	0.36	0.44	0.58	0.78	dB	0.076
FMCA10010-24	24 inch	Insertion Loss (Typ.)	0.42	0.52	0.68	0.96	1.36	dB	0.087
FMCA10010-36	36 inch	Insertion Loss (Typ.)	0.53	0.68	0.92	1.34	1.94	dB	0.097
FMCA10010-48	48 inch	Insertion Loss (Typ.)	0.64	0.84	1.16	1.72	2.52	dB	0.107
FMCA10010-72	72 inch	Insertion Loss (Typ.)	0.86	1.16	1.63	2.48	3.68	dB	0.127

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:	0.1 dB
Base Weight:	0.076 pounds
Additional Weight per Inch:	0.00084 pounds

Mechanical Specifications

Cable Assembly

Weight	0.076 lbs [34.47 g]
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Cable

Cable Type	RG-316
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	1
Shield Layer 1	Silver Plated Copper Braid
Jacket Material	FEP, Tan
Jacket Diameter	0.102 in [2.59 mm]

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Connectors

Description	Connector 1	Connector 2
Type	BNC Male	BNC Female Bulkhead
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Nickel
Outer Conductor Plating Specification		100 µin minimum
Body Material and Plating	Brass, Nickel	
Body Plating Specification	100 µin minimum	
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100 µin minimum	
Hex Size	1/4 inch	

Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

Plotted and Other Data

Notes:

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FMCA10010

Typical Performance Data

How to Order

Part Number Configuration: **FMCA10010** **- xx** **uu**

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

Length

Base Number

Example: FMCA10010-12 = 12 inches long cable
FMCA10010-100cm = 100 cm long cable

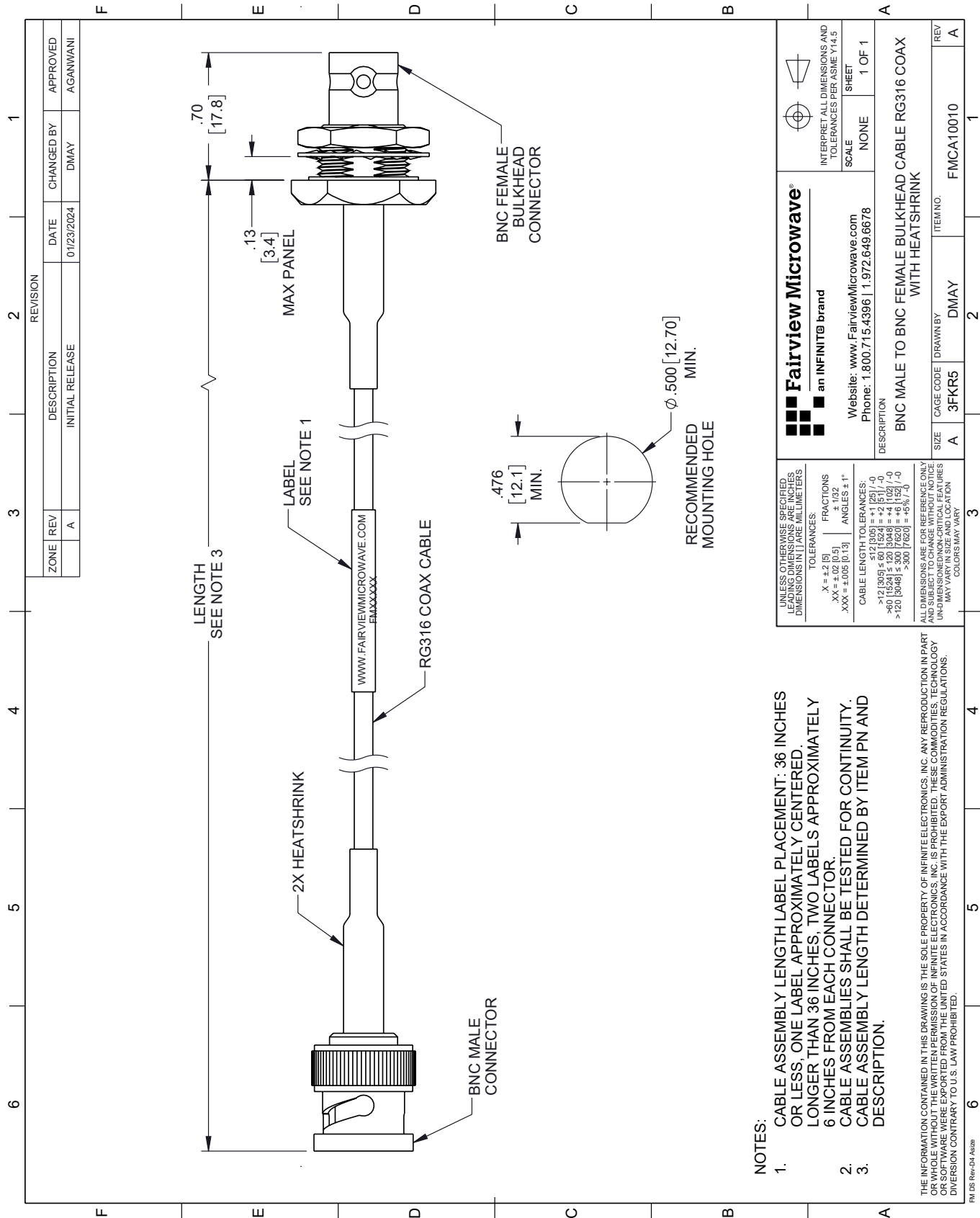
BNC Male to BNC Female Bulkhead Cable RG-316 Coax from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [BNC Male to BNC Female Bulkhead Cable RG-316 Coax FMCA10010](https://www.fairviewmicrowave.com/bnc-male-to-bnc-female-bulkhead-cable-rg-316-coax-fmca10010-p.aspx)

URL: <https://www.fairviewmicrowave.com/bnc-male-to-bnc-female-bulkhead-cable-rg-316-coax-fmca10010-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.

FMCA10010 CAD Drawing
BNC Male to BNC Female Bulkhead Cable RG-316 Coax



- NOTES:
1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS; ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, TRAILING DIMENSIONS ARE IN MILLIMETERS		Fairview Microwave® an INFINITI® brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
TOLERANCES:		Website: www.FairviewMicrowave.com		SCALE NONE	
X = ±.2 [5]		Phone: 1.800.715.4396 1.972.649.6678		SHEET 1 OF 1	
XX = ±.02 [0.5]					
XXX = ±.005 [0.13]					
FRACTIONS ± 1/32					
ANGLES ± 1°					
CABLE LENGTH TOLERANCES:					
>12 [305] ≤ 60 [1524] = ±.1 [25] / -0					
>60 [1524] ≤ 120 [3048] = ±.1 [25] / -0					
>120 [3048] ≤ 300 [7620] = ±.1 [25] / -0					
>300 [7620] ≤ 500 [12700] = ±.1 [25] / -0					
ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS.					
MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.					
DESCRIPTION		BNC MALE TO BNC FEMALE BULKHEAD CABLE RG316 COAX WITH HEATSHRINK			
ITEM NO.		FMCA10010			
SIZE		A			
CAGE CODE		3FKR5			
DRAWN BY		DMAY			
REV		A			