

# FMCA2676/BL DATA SHEET

# 6G SDI 75 Ohm HD-BNC Male to 75 Ohm HD-BNC Male Cable 75 Ohm 1694A-BL Coax

The 75 ohm HD-BNC male to 75 ohm HD-BNC male cable using 75 ohm 1694A-BL coax, part number FMCA2676/BL, from Fairview Microwave is in-stock and ships same day. This Fairview HD-BNC to HD-BNC cable assembly has a male to male gender configuration with 75 ohm flexible Belden 1694A-BL coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA2676/BL HD-BNC male to HD-BNC male cable assembly operates to 6 GHz and enables 6Gb/s data transfer rates for high resolution uncompressed video signal transmission. These products offer 4K and Ultra-HD quality signals that meet SMPTE Standard 2081-1.

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			6		GHz	
VSWR				1.5:1			
Velocity of Propagation		3	32			%	
Group Delay		4.06	[13.32]		ns/f	t [ns/n	n]
Capacitance		16.2	[53.15]		pF/f	t [pF/r	n]
Inductance		0.347	7 [1.14]		uH/f	t [uH/r	m]
DC Resistance Inner Cor	nductor	6.4	[21]		Ω/100	Oft [Ω/	Km]
DC Resistance Outer Cor	nductor	3.8 [	12.47]		Ω/100	Oft [Ω/	Km]
Operating Voltage (AC)				300	١	/rms	

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	6	GHz
Insertion Loss (Typ.)	0.03	0.043	0.063	0.103	0.177	dB/ft
	0.1	0.14	0.21	0.34	0.58	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 0.1 lbs [45.36 g]

Cable

Cable Type Impedance Inner Conductor Type Belden 1694A-BL 75 Ohms Solid



## **Configuration:**

- HD-BNC Male
- HD-BNC Male
- Belden 1694A-BL

#### Features:

- Max Frequency 6 GHz
- 82% Phase Velocity
- PVC Jacket
- Meets SMPTE ST 2081-1
- 6Gb/s Transmission
- Cost Effective

## **Applications:**

- General Purpose
- Laboratory Use
- 6G-SDI, Video, and Broadband UHDTV
- Broadband Internet Delivery
- Broadcast A/V
- 4K/8K Video Equipment
- Medical Equipment Requiring High Speed Video
- HD Cameras

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Inner Conductor Material and Plating

Dielectric Type Number of Shields

Number of Shields
Shield Layer 1
Shield Layer 2
Jacket Material
Jacket Diameter

Copper, Bare

PE 1

> Aluminum Polyester Tinned Copper

PVC, Blue

0.274 in [6.96 mm]

#### **Connectors**

Description	Connector 1	Connector 2
Туре	HD-BNC Male	HD-BNC Male
Impedance	75 Ohms	75 Ohms
Contact Material & Plating	Brass, Gold	Brass, Gold
Contact Plating Spec.	10 μin minimum	10 µin minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Platin	ng Brass, Nickel	Brass, Nickel
Outer Cond Plating Spec.	50 μin minimum	50 μin minimum
Body Material & Plating	Brass, Nickel	Brass, Nickel
Body Plating Spec.	100 μin minimum	100 µin minimum
Seal Gasket Material	Silicone	

## **Environmental Specifications**

Temperature

Operating Range

-20 to +75 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:

FMCA2676/BL - xx

cm = Centimeters <blank> = Inches

Length

Example: FMCA2676/BL-12 = 12 inches long cable

FMCA2676/BL-100cm = 100 cm long cable

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6G SDI 75 Ohm HD-BNC Male to 75 Ohm HD-BNC Male Cable 75 Ohm 1694A-BL Coax 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: 6G SDI 75 Ohm HD-BNC Male to 75 Ohm HD-BNC Male Cable 75 Ohm 1694A-BL Coax FMCA2676/BL

URL: https://www.fairviewmicrowave.com/6g-sdi-75-ohm-hd-bnc-male-to-75-ohm-hd-bnc-male-cable-75-ohm-1694a-bl-coax-fmca2676-bl-p.aspx







