

## FMCA2603/BL-120 DATA SHEET

# 12G SDI 75 Ohm BNC Male to 75 Ohm 1.0/2.3 Male Cable 75 Ohm 4694R-BL Coax in 120 Inch

The 75 ohm BNC male to 75 ohm 1.0/2.3 male 120 inch cable using 75 ohm 4694R-BL coax, part number FMCA2603/BL-120, from Fairview Microwave is instock and ships same day. This Fairview BNC to 1.0/2.3 cable assembly has a male to male gender configuration with 75 ohm flexible Belden 4694R-BL coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA2603/BL-120 BNC male to 1.0/2.3 male cable assembly operates to 12 GHz and enables 12Gb/s data transfer rates for high resolution uncompressed video signal transmission. These products offer 4K and Ultra-HD quality signals that meet SMPTE Standard 2082-1.

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	U	nits	
Frequency Range	DC			12		GHz	
VSWR				1.5:1			
Velocity of Propagation		8	4.5			%	
Group Delay		1.2	[3.94]		ns/ft	[ns/n	n]
Capacitance		15.9	[52.17]		pF/ft	: [pF/n	n]
Inductance		0.106	[0.35]		uH/ft	: [uH/r	n]
DC Resistance Inner Cor	nductor	6.4	[21]		Ω/100	Oft [Ω/I	Km]
DC Resistance Outer Cor	nductor	2.8	[9.19]		Ω/100	Oft [Ω/I	Km]
Operating Voltage (AC)				300	V	′rms	

## **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2.5	5	12	GHz
Insertion Loss (Typ.)	0.61	0.79	1.16	1.59	2.5	dB

#### **Electrical Specification Notes:**

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

## **Mechanical Specifications**

## **Cable Assembly**

Length\* 120 in [304.8 cm] Weight 0.3 lbs [136.08 g]

#### Cable

Cable Type Impedance Inner Conductor Type 0.3 lbs [136.08 g]

Belden 4694R-BL 75 Ohms

Solid



## **Configuration:**

- BNC Male
- 1.0/2.3 Male
- Belden 4694R-BL

## Features:

- Max Frequency 12 GHz
- 84.5% Phase Velocity
- PVC Jacket
- Meets SMPTE ST 2082-1
- Backwards Compatible with 2081-1
- 12Gb/s Transmission
- Cost Effective

## **Applications:**

- General Purpose
- Laboratory Use
- 12G-SDI, Video, and Broadband UHDTV
- Broadband Internet Delivery
- Broadcast A/V
- 4K/8K Video Equipment
- Medical Equipment Requiring High Speed Video
- HD Cameras

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 Material and Plating

Dielectric Type Number of Shields

Shield Layer 1 Shield Layer 2 Jacket Material Jacket Diameter Copper, Silver

HDPE 1

Aluminum Polyester Tinned Copper

PVC, Blue

0.274 in [6.96 mm]

#### **Connectors**

Description	Connector 1	Connector 2
Туре	BNC Male	1.0/2.3 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 & Plati	ng Brass, Nickel	Brass, Gold
Outer Cond Plating Spec.	50 μin minimum	3 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

-30 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:

FMCA2603/BL - xx

cm = Centimeters <blank> = Inches

– Length

Example: FMCA2603/BL-12 = 12 inches long cable

FMCA2603/BL-100cm = 100 cm long cable

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12G SDI 75 Ohm BNC Male to 75 Ohm 1.0/2.3 Male Cable 75 Ohm 4694R-BL Coax in 120 Inch 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: 12G SDI 75 Ohm BNC Male to 75 Ohm 1.0/2.3 Male Cable 75 Ohm 4694R-BL Coax in 120 Inch FMCA2603/BL-120

URL: https://www.fairviewmicrowave.com/12g-sdi-75-ohm-bnc-male-to-75-ohm-1.0-2.3-male-cable-75-ohm-4694r-bl-coax-in-120-inch-fmca2603-bl-120-p.aspx







