

FMCA2605/BL DATA SHEET

12G SDI 75 Ohm HD-BNC Male to 75 Ohm 1.0/2.3 Male Cable 75 Ohm 4694R-BL Coax

The 75 ohm HD-BNC male to 75 ohm 1.0/2.3 male cable using 75 ohm 4694R-BL coax, part number FMCA2605/BL, from Fairview Microwave is in-stock and ships same day. This Fairview HD-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 FMCA2605/BL HD-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	Inits
Frequency Range	DC			12		GHz
VSWR				1.5:1		
Velocity of Propagation		84	4.5			%
Group Delay		1.2	[3.94]		ns/f	t [ns/m]
Capacitance		15.9	[52.17]		pF/fl	[pF/m]
Inductance		0.106	[0.35]		uH/f	t [uH/m]
DC Resistance Inner Cor	nductor	6.4	[21]		Ω/100	Oft [Ω/Km]
DC Resistance Outer Cor	nductor	2.8	9.19]		Ω/100	0ft [Ω/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.)	0.041	0.059	0.096	0.139	0.23	dB/ft
	0.13	0.19	0.31	0.46	0.75	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 4694R-BL 75 Ohms

Solid



Configuration:

- HD-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 Laver 1

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	HD-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:

FMCA2605/BL - xx

cm = Centimeters <blank> = Inches

Length

Example: FMCA2605/BL-12 = 12 inches long cable

FMCA2605/BL-100cm = 100 cm long cable

Copyright © 2020

REV 1 Page 2 of 4





 $12G\ SDI\ 75\ Ohm\ HD$ -BNC Male to $75\ Ohm\ 1.0/2.3$ Male Cable $75\ Ohm\ 4694R$ -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: 12G SDI 75 Ohm HD-BNC Male to 75 Ohm 1.0/2.3 Male Cable 75 Ohm 4694R-BL Coax FMCA2605/BL

URL: https://www.fairviewmicrowave.com/12g-sdi-75-ohm-hd-bnc-male-to-75-ohm-1.0-2.3-male-cable-75-ohm-4694r-bl-coax-fmca2605-bl-p.aspx







