

FMCA2675/BR DATA SHEET

6G SDI 75 Ohm BNC Male to 75 Ohm 1.0/2.3 Male Cable 75 Ohm 1694A-BR Coax

The 75 ohm BNC male to 75 ohm 1.0/2.3 male cable using 75 ohm 1694A-BR coax, part number FMCA2675/BR, from Fairview Microwave is in-stock 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 Belden 1694A-BR coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA2675/BR BNC male to 1.0/2.3 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	Typ Max		Units			
Frequency Range	DC			6		GHz	
VSWR				1.5:1			
Velocity of Propagation		3	32			%	
Group Delay		4.06	13.32]		ns/ft	[ns/n	n]
Capacitance		16.2	53.15]		pF/ft	[pF/n	n]
Inductance		0.347	[1.14]		uH/ft	[uH/r	m]
DC Resistance Inner Conductor		6.4	[21]		Ω/1000	Oft [Ω/I	Km]
DC Resistance Outer Cor	nductor	3.8 [12.47]		Ω/1000	Oft [Ω/I	Km]
Operating Voltage (AC)				300	V	'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 Belden 1694A-BR 75 Ohms Solid



Configuration:

- BNC Male
- 1.0/2.3 Male
- Belden Belden 1694A-BR

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

1 Shield Layer 1 Aluminum Polyester Shield Layer 2 Tinned Copper PVC, Brown Jacket Material 0.274 in [6.96 mm] Jacket Diameter

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 & Plating	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 minimu			
Seal Gasket Material	Silicone			

Environmental Specifications

Temperature

Operating Range

-20 to +75 deg C

Copper, Bare

PΕ

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:

FMCA2675/BR - xx

<black> = Inches

cm = Centimeters

Length

Example: FMCA2675/BR-12 = 12 inches long cable

FMCA2675/BR-100cm = 100 cm long cable

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 $6G\ SDI\ 75\ Ohm\ BNC\ Male\ to\ 75\ Ohm\ 1.0/2.3\ Male\ Cable\ 75\ Ohm\ 1694A-BR\ Coax\ from\ Fairview\ Microwave\ has\ same\ day\ shipment\ for\ domestic\ and\ International\ orders.$ 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 BNC Male to 75 Ohm 1.0/2.3 Male Cable 75 Ohm 1694A-BR Coax FMCA2675/BR

The information contained in 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

URL: https://www.fairviewmicrowave.com/6g-sdi-75-ohm-bnc-male-to-75-ohm-1.0-2.3-male-cable-75-ohm-1694a-br-coax-fmca2675-br-p.aspx

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