

# FMCA2675/OR DATA SHEET

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

The 75 ohm BNC male to 75 ohm 1.0/2.3 male cable using 75 ohm 1694A-OR coax, part number FMCA2675/OR, 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 1694A-OR coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA2675/OR 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	Т	ур	Max	U	nits	
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 Cor	nductor	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 1694A-OR 75 Ohms Solid



# **Configuration:**

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

## 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

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

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

#### **Connectors**

Description	Connector	1 Connecto	r 2	
Туре	BNC Male	1.0/2.3 M	ale	
Impedance	75 Ohms	75 Ohm:	75 Ohms	
Contact Material & Plating	Brass, Gold	Brass, Go	Brass, Gold	
Contact Plating Spec.	10 μin minimu	um 10 µin minin	num	
Dielectric Type	PTFE	PTFE		
Outer Cond Material & Plati	ng Brass, Nicke	el Brass, Go	Brass, Gold	
Outer Cond Plating Spec.	50 μin minimu	um 3 µin minim	3 µin minimum	
Body Material & Plating	Brass, Nicke	el Brass, Nick	Brass, Nickel	
Body Plating Spec.	100 µin minim	ium 100 µin minii	100 µin minimum	
Seal Gasket Material	Silicone			

Copper, Bare

PΕ

# **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:

FMCA2675/OR - xx

cm = Centimeters <black> = Inches

Length

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

FMCA2675/OR-100cm = 100 cm long cable





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

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







