

# FMCA2674/BK-300 DATA SHEET

# 6G SDI 75 Ohm BNC Male to 75 Ohm HD-BNC Male Cable 75 Ohm 1694A-BK Coax in 300 Inch

The 75 ohm BNC male to 75 ohm HD-BNC male 300 inch cable using 75 ohm 1694A-BK coax, part number FMCA2674/BK-300, from Fairview Microwave is instock and ships same day. This Fairview BNC to HD-BNC cable assembly has a male to male gender configuration with 75 ohm flexible Belden 1694A-BK coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA2674/BK-300 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	T <mark>yp Max</mark>		Units	
Frequency Range	DC			6	G	Hz
VSWR				1.5:1		
Velocity of Propagation		8	32		9	6
Group Delay		4.06	[13.32]		ns/ft [	ns/m]
Capacitance		16.2	53.15]		pF/ft [	pF/m]
Inductance		0.347	[1.14]		uH/ft [	uH/m]
DC Resistance Inner Conductor		6.4 [21]		Ω/1000ft [Ω/Km]		
DC Resistance Outer Cor	nductor	3.8 [	12.47]		Ω/1000f	t [Ω/Km]
Operating Voltage (AC)				300	Vr	ms

Performance by	Freq <mark>ue</mark>	ncy				
Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	6	GHz
Insertion Loss (Typ.)	0.95	1.28	1.78	2.78	4.63	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\* Weight

Cable Cable Type Impedance Inner Conductor Type 300 in [762 cm] 0.6 lbs [272.16 g]

Belden 1694A-BK 75 Ohms Solid



# **Configuration:**

- BNC Male
- HD-BNC Male
- Belden 1694A-BK

### **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 Shield Layer 1 Shield Layer 2 Jacket Material Jacket Diameter Copper, Bare PE 1 Aluminum Polyester Tinned Copper PVC, Black 0.274 in [6.96 mm]

### Connectors

Description	Connector 1	Connector 2	Connector 2		
Туре	BNC Male	HD-BNC Male			
Impedance	75 Ohms	75 Ohms			
Contact Material & Plating	Brass, Gold	Brass, Gold			
Contact Plating Spec.	10 µin min <mark>i</mark> mum	10 µin minimum			
Dielectric Type	PTFE	PTFE			
Outer Cond Material & Plati	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	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: FMCA2674/BK - xx uu cm = Centimeters <blank> = Inches Length

Example: FMCA2674/BK-12 = 12 inches long cable FMCA2674/BK-100cm = 100 cm long cable

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6G SDI 75 Ohm BNC Male to 75 Ohm HD-BNC Male Cable 75 Ohm 1694A-BK Coax in 300 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.

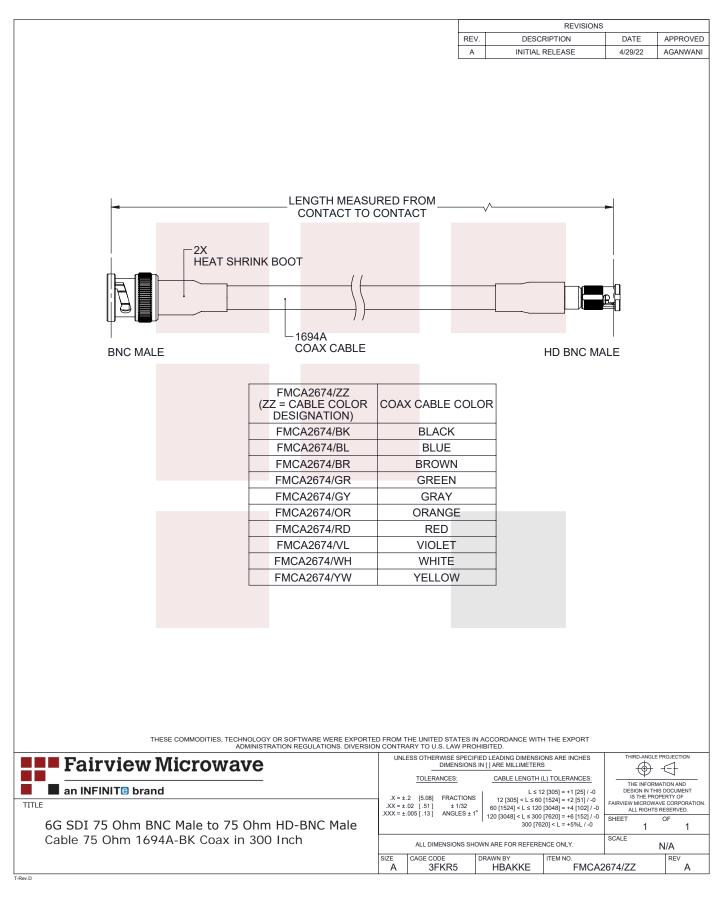
Click the following link to obtain additional part information: 6G SDI 75 Ohm BNC Male to 75 Ohm HD-BNC Male Cable 75 Ohm 1694A-BK Coax in 300 Inch FMCA2674/BK-300

URL: https://www.fairviewmicrowave.com/6g-sdi-75-ohm-bnc-male-to-75-ohm-hd-bnc-male-cable-75-ohm-1694a-bkcoax-in-300-inch-fmca2674-bk-300-p.aspx









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